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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

S. 1085

AUTHORIZING APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEARS FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

PART 1

U.S. MILITARY POSTURE
BUDGET OVERVIEW

MAY 3, 4, 10; JUNE 15, 1989

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CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

AMENDED DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEARS 1990 AND 1991

MAY 3, 1989

Page
Cheney, Hon. Richard B., Secretary of Defense 7
Crowe, Adm. William J., Jr., Chairman, Joint Chiefs of Staff 36

AMENDED DEFENSE AUTHORIZATION REQUEST (FISCAL YEARS 1990 AND 1991) AND THE FIVE YEAR DEFENSE PLAN (FISCAL YEARS 1990–1994)

MAY 4, 1989

Vuono, Gen. Carl E., Chief of Staff, U.S. Army 134
Trost, Adm. Carlisle A.H., Chief of Naval Operations, U.S. Navy 144
Welch, Gen. Larry D., Chief of Staff, U.S. Air Force 159
Gray, Gen. Alfred M., Jr., Commandant, U.S. Marine Corps 173

FIVE YEAR DEFENSE PROGRAM

MAY 10, 1989

Ireland, Hon. Andy, a U.S. Representative from the State of Florida 282
Bowsher, Charles A., Comptroller General of the United States, U.S. General Accounting Office, accompanied by Frank C. Conahan, Assistant Comptroller General for National Security and International Affairs, U.S. General Accounting Office 286

PROGRAMS RECOMMENDED FOR TERMINATION

JUNE 15, 1989

Atwood, Hon. Donald J., Deputy Secretary of Defense, accompanied by Hon. David S.C. Chu, Assistant Secretary of Defense for Program Analysis and Evaluation; and Hon. Sean O'Keefe, Comptroller, Department of Defense 349
Index ..... (i)

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991

WEDNESDAY, MAY 3, 1989

U.S. Senate,
Committee on Armed Services,
Washington, DC.

AMENDED DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEARS 1990 AND 1991

The committee met at 9:05 a.m. in room SH-216, Hart Senate Office Building, Senator Sam Nunn (chairman) presiding.

Committee members present: Senators Nunn, Exon, Levin, Bingaman, Dixon, Glenn, Gore, Wirth, Shelby, Warner, Cohen, McCain, Wallop, Gorton, Lott, and Coats.

Committee staff members present: Arnold L. Punaro, staff director; Andrew S. Effron, general counsel; Richard D. DeBobes, counsel; Marie Fabrizio Dickinson, assistant chief clerk; Daniel G. Sakura, research assistant.

Professional staff members present: Robert E. Bayer, Richard D. Finn, Jr., John J. Hamre, James R. Locher III, David S. Lyles, Michael J. McCord, Frederick F.Y. Pang, and Patricia L. Watson.

Minority staff members present: Patrick A. Tucker, minority staff director and counsel; Romie L. Brownlee, deputy staff director for the minority; Robert F. Bott, Brian D. Dailey, Judith A. Freedman, Ronald P. Kelly, George W. Lauffer, Durwood W. Ringo, Jr., and Mark B. Robinson, professional staff members.

Staff assistants present: Barbara L. Braucht, Barbara Gallo, Lori M. Jackson, Mary J. Kampo, Cindy Pearson, Kelli J. Pronovost, Debra A. Rice, and Mickie Jan Wise.

Committee members' assistants present: Jeffrey B. Subko, assistant to Senator Exon; Kenneth N. Luongo, assistant to Senator Levin; William J. Lynn, assistant to Senator Kennedy; Edward M. McGaffigan, Jr., assistant to Senator Bingaman; Charles C. Smith, assistant to Senator Dixon; Phillip P. Upschulte and Milton D. Beach, assistants to Senator Glenn; Leon S. Fuerth, assistant to Senator Gore; Jefferson B. Seabright, assistant to Senator Wirth; Terrence M. Lynch, assistant to Senator Shelby; James M. Bodner, assistant to Senator Cohen; Christopher K. Mellon, assistant to Senator Cohen; Anthony H. Cordesman, assistant to Senator McCain; Robert M. Soofer, assistant to Senator Gorton; Lawrence M. Lesser and Charles Pearcy, assistants to Senator Lott; and Eric H. Thoemmes, assistant to Senator Coats.

OPENING STATEMENT OF SENATOR SAM NUNN, CHAIRMAN

Chairman NUNN. The committee will come to order.

I want to welcome Secretary of Defense Cheney and Admiral Crowe to the committee this morning. This is Secretary Cheney's first appearance before the Senate Armed Services Committee since he has been officially confirmed by the Senate and has become Secretary of Defense.

As we have for the last 2 years, the committee preceded its review of the defense authorization request this year with a series of strategy-related hearings. Witnesses from outside the Government testified on the implications of Soviet President Gorbachev's security and economic policies and on negotiations on conventional forces in Europe. We also heard testimony on military strategy and operational requirements from Admiral Crowe, from eight of the unified and specified commanders, and from the commander of U.S. forces in Korea.

These hearings have provided a very useful framework for our review of the fiscal years 1990–91 defense budget and for our future review and discussions with the administration when we have the results of the national strategy review, which I understand, Mr. Secretary, will be sometime late spring or early summer.

The budget amendment being presented this morning represents a substantial revision of the fiscal years 1990–91 defense budget which President Reagan submitted to Congress before he left office. The budget authority level requested for both fiscal years 1990 and 1991 is approximately $10 billion below the level requested in January, as I understand it, and we will hear further from the Secretary on this. This is a total reduction in budget authority of about $65 billion over the 5-year defense plan, so there is a lot of budget authority here that has a big effect over the 5-year period.

Mr. Secretary, I know in your review you looked at the whole 5 years. One of my critiques in the past several years has been in making reductions the Defense Department has looked at only 1 year and many times taken programs and postponed them for 1 year, but basically the assumption has been that all of those cuts were going to be added back.

One of the things I commend you for in reviewing the budget is that I do not think you have done that. We will get into questions. You have looked more at the 5-year implications and I think that is absolutely essential and I hope our committee will keep our view on the longer term.

While I am on that subject—and I voted for the Gramm-Rudman amendment—I think one of the very counterproductive forces at play today more and more is that the Gramm-Rudman amendment, particularly but not limited to defense, is requiring us to take such a short-range look that we are doing things in the short run in order to meet 1-year targets that cost more money over 5 years.

So I think we have to watch very carefully or things are going to be done that are very counterproductive—for instance, starting new programs that have low outlay levels the first year but cost a lot more over 5 years, thereby saying we have met the outlay target and yet making the problem the year after next and in future years much more difficult. It is my view that you have not done that, and we will be getting into that as we go along here.

The budget agreement means that fiscal year 1990 will be the fifth consecutive year of negative real growth in the defense budget. Many people do not realize that, particularly because in the last several years the Reagan administration submitted budgets that had real growth and people focused on that in the country and did not focus on what the bottom line was when the congressional process was over, which was negative real growth. So this is 5 years in a row that the defense budget has been cut. I continually have people who follow the news pretty carefully ask me when we are going to start cutting the defense budget. The answer is, we started 5 years ago and this is the fifth year in a row that the budget has gone down. But the public does not recognize that yet, and I think it is very important.

The fiscal year 1990 to 1994 5-year defense plan includes real growth in defense spending of 1 to 2 percent each year beginning in fiscal year 1991. That is the 5-year plan. Many of us would like to see a pattern of stable, predictable levels for defense spending, but in my view this is not going to happen until we see a lot more progress in reducing the deficit than was made in the bipartisan budget agreement this year, something that is, of course, beyond the control of the Defense Department itself. It goes to the White House and to the congressional process.

Secretary Cheney, I think you deserve a great deal of credit for putting together this budget amendment in your first 6 weeks in office, a very difficult task, and I know you would have preferred to have already completed the strategic review prior to submitting this budget amendment, but the time frame certainly did not permit that. I do not think anyone, however, should believe that this budget amendment and the bipartisan budget agreement at the leadership level means that we are going to have smooth sailing through the rest of this year. There are many problems that we are going to face together. Let me just mention a couple of problems.

First, enacting a 2-year defense budget this year may be extremely difficult. It was my amendment that started this process several years ago, and I give Secretaries Weinberger and Carlucci good marks for really doing a sincere job in trying to work on a 2-year budget. I am pleased that you, Mr. Secretary, have continued strong support for a 2-year budget by your predecessors by submitting a 2-year budget agreement. But there is a big problem, and that is the bipartisan budget agreement between the White House and Congress covered only 1 fiscal year. Right now there is no agreement between Congress and the White House on the overall level of defense spending or any other aspect of the Federal budget for the second year of the 2-year budget. That means it is very hard for us as a defense committee to get the rest of the committees and Congress to go along with approving a defense budget that has 2 years in it when no other part of the budget has 2 years. It is against that background that we have to work. We will do our best to enact as much of a 2-year budget as is feasible and possible under these constraints.

The second problem—and this is a very large problem and I mentioned it to you when we met a couple of weeks ago and you gave us a little preview—Congress may have problems meeting the budget target for national defense in this year's budget. The Congressional Budget Office estimates that the budget amendment that you have submitted and the Bush administration has submitted on defense will exceed the outlay level in the bipartisan budget agreement by approximately $3.8 billion in fiscal year 1990. In other words, the Congressional Budget Office has a different estimate of outlays resulting from your amendment if we enacted it simply just as submitted than does the Office of Management and Budget and the Defense Department.

If Congress and this committee and appropriators are also forced to abide by the Congressional Budget Office's outlay estimates, as we have in the past, we will have to find a way to save another $3.5 billion in outlays in the amended fiscal year 1990 request that is presented here this morning. I do not know what we are going to do about that. We are going to have to work that problem together because that could mean either we have to cut budget authority much more than the agreement so we can meet the outlay target, we have to have a lesser budget authority target if we go by the CBO estimate, or it may mean that we have to find ways of dealing with that.

One of the natural instincts of Congress in doing that is to start major new programs that have large outlays in future years but low outlays now that use more budget authority but less outlays in the first year. Of course, as I mentioned a few minutes ago, that becomes counterproductive over a 5-year period in trying to reach any kind of level.

Mr. Secretary, you have made some very tough choices in preparing this budget amendment. I know Admiral Crowe and the Chiefs have worked very carefully with you. Some of the decisions are controversial and will be debated by Congress over the next several months, but I think you deserve credit for facing these problems squarely and you certainly deserve a fair hearing on the reasons for your decisions. If we do not like some of the actions the Pentagon has recommended to meet the budget target, then it is up to us to propose realistic alternatives that also meet that target.

Mr. Secretary, as I mentioned, this is your first appearance before this committee since you have been Secretary. It is not your first appearance before Congress. You appeared before the House last week. In this regard, Mr. Secretary, you have made some very controversial remarks that have very significant implications for the Senate, for the security of our Nation, and we want to make sure that the American people do not get a distorted picture of Washington leadership. Last week before the House you referred to the House of Representatives, and I quote you, "a cut above the other body." I have ordered a committee investigation of this. [Laughter.]

I am thinking about getting the FBI involved. We will want to know this morning whether you were free-lancing when you made these remarks or whether you were speaking for the entire Defense Department. Quoting a famous member of the Bush administration cabinet, Mr. Secretary, "we believe in fairness. We believe that everyone is entitled to one mistake." But we will be asking you questions on your view of the Senate itself this morning, and we will give you every opportunity to revise your remarks before the House. With that, I do not know whether Senator Warner—he is not here at this moment. He is on his way. Are there any other opening statements?

Senator WALLOP. Mr. Chairman, I would just like to observe that the Senate at least has chosen some domestic defense experts to counsel us on budget matters, unlike our counterparts in the House, who seem to prefer overseas counsel. [Laughter.]

Chairman NUNN. Observation duly noted.

Senator COHEN. Mr. Chairman, I would only point out that I am told that the reference to this body has been deleted and is missing from the files of the House of Representatives. The FBI is unlikely to uncover that particular document. [Laughter.]

Chairman NUNN. Thank you, Senator Cohen.

Senator Dixon, Senator Thurmond, and Senator Wilson have prepared statements for the record which shall be included at this time.

[The prepared statements of Senators Dixon, Thurmond, and Wilson follow:]

PREPARED STATEMENT OF SENATOR ALAN J. DIXON

I am pleased to welcome our distinguished witnesses, Secretary of Defense Richard Cheney and the Chairman of the Joint Chiefs of Staff, Admiral William Crowe. I'm eager to learn how our defense needs will best be served by the budget requests that they have submitted.

Undoubtedly, our witnesses have made some gut-wrenching decisions. It is clear that we cannot afford to modernize our forces as much as we had planned, and we are struggling to fund the force structure and forward deployment strategy that we now employ to meet our commitments. Yet, if the administration adopts the findings of a soon to be completed strategic review, our global security commitments will remain unchanged, and we will still need to continue to modernize, sustain and support the forces we now have.

Clearly, something has to give. We need additional support from our regional allies if they expect us to maintain the level of security that we have been providing. The South Koreans can obviously afford to expand their military force to counter the threat from North Korea, yet we continue to maintain forces on the peninsula without encouraging a South Korean military expansion. We should be pressing the Japanese to wisely spend their limited defense dollars on reducing our burden for their defense rather than helping Japan build an aircraft that will cost billions of additional dollars. Although difficult to achieve because of Secretary General Gorbachev's initiatives, the defense stance of our NATO allies should involve more of their own contributions and a bigger share of the defense burden.

We need to live within our means and in this amended defense budget we are heading in that direction with regard to our naval force structure. By holding our carrier battle groups at 14 rather than expanding to 15, and by transferring ships and aircraft from the Active to Reserve Forces, we are being realistic about our current financial inability to afford a 600-ship Navy.

As chairman of the Subcommittee on Readiness, Sustainability and Support, I am happy that we are not reducing steaming time nor reducing the flying hours our aviators need to maintain their current level of proficiency. On the other hand, I am disturbed that planned logistical improvements have been deferred and that depot and real property maintenance backlogs will grow. I also believe that canceling the V-22 Osprey transport helicopter program will give us a less capable and less survivable fighting force that will have to continue relying on aging CH-46 helicopters, which were last built in 1975.

In the coming weeks, this committee will make a number of critical decisions concerning this defense budget. I am glad we have the Defense Department's top leadership here today to help us complete our difficult task. I look forward to their testimony.

PREPARED STATEMENT OF SENATOR STROM THURMOND

Mr. Chairman, I join you and the members of this committee in welcoming our distinguished witnesses, Secretary Cheney and Admiral Crowe.

Mr. Chairman, today's hearing is the beginning of what I consider our most important function—the authorization of funds for the Department of Defense that will take the Department into the next decade.

The series of hearings you sponsored on strategy have provided the members of the committee a good foundation on what we can expect from both the Soviet Union and other potential trouble makers during the coming years. Most significant in what I have heard is that despite all the rhetoric from Mr. Gorbachev there has been little action to back up his words. In fact, reports indicate that Soviet defense spending in the last year was up 3 percent while ours declined.

This committee faces the challenges of reducing our budget deficit and keeping a strong defense. I strongly support both efforts and will carefully evaluate the budget that is before us today.

Secretary Cheney, you have made some difficult decisions in achieving the cuts you had to make. I congratulate you on your efforts and wish you the best.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF SENATOR PETE WILSON

Secretary Cheney and Admiral Crowe, I wish to welcome you this morning and thank you for taking the time to discuss the Defense Department's military posture outlook for fiscal year 1990. Admiral Crowe, I want to compliment you on your recent appearance on the TV program "Cheers." Shall I alert Hollywood to your interest in further roles?

I would like to focus today on a vital component of the Defense Department's mission—drug interdiction—that Congress codified in an amendment to the DOD Authorization Act last September, the so-called Wilson-Nunn provision. One of the major national security threats faced by the United States is that posed by illegal narcotics. Illicit drugs entering our country destroy the very roots and social fabric of our Nation. The lives of our children are threatened and the level of violent crime in communities all across the Nation is threatening. A recent study by the Department of Justice found that in 12 major metropolitan areas across the United States, between one-half and three-fourths of the men arrested for violent crimes tested positive for the use of illegal drugs.

In response to the justified cry from our constituents for leadership, Congress responded in part with the military-drug interdiction amendment to the 1989 Defense Authorization Act. This legislation established DOD as the lead agency for coordinating the command, control, and communications assets of relevant Federal agencies for the monitoring and pursuit of drug smugglers in the air and on the high seas. It also made a variety of Defense Department, National Guard, and Reserve assets available to civilian drug enforcement agencies for tracking narcotic smugglers and conducting border inspections.

As I speak this morning, an act of violence is most likely ripping apart a street corner business or an efficiency apartment a 5-minute drive from this room. This national security problem is real, it is growing, it is all around us, and the Defense Department's vast air, sea, and ground reconnaissance capabilities make it a natural defender of America in the struggle against narcotics. The enemy at our door this moment is not the Soviets, but the poison of drugs invading the bodies of our Nation's youth.

Seven months, Mr. Chairman, have now passed since the effective date of this bill, and the Department of Defense has yet to fully fund and implement one National Guard drug interdiction plan, it has yet to present Congress with a C3I integration plan, and it has yet to loan any significant active duty personnel to permanently support interdiction activities. The Defense Department, in my view, has not sufficiently responded to the instructions of law even though Congress appropriated $300 million last year for military drug interdiction activities and President Bush has requested another $317 million this year.

I fully recognize that the battle against drugs is a multi-front war, and we must work harder and provide more resources to curb the demand for narcotics within our own borders. The impact of drug education, treatment, and rehabilitation programs, however, will be severely diminished if international trafficking cartels can ship illegal drugs to the United States with little fear of apprehension. As long as a steady flow of drugs can safely make it to the streets of America, urban gangs and other thugs will impose their terror on the neighborhoods and citizens of our Nation

with impunity. We are at war, Mr. Chairman, we know the enemy, but the casualties and body count increase by the hour. America needs a stalwart defense against these new dealers of death. The drug threat is real, it is now, and you gentlemen of the Defense Department control the assets needed to solve a major part of the problem. I want action, Congress has mandated action, and the American people are desperate for your action.

Chairman NUNN. Mr. Secretary.

STATEMENT OF HON. RICHARD B. CHENEY, SECRETARY OF DEFENSE

Secretary CHENEY. That is a great lead-in, Mr. Chairman. I did in fact make that statement. I have to admit it. There was a reporter present and it is all down verbatim. I would hope that my friends on the Senate Armed Services Committee would allow a little bit of leeway for a former Member of the other body. While I am trying to unlearn bad habits and alter preconceived notions, I still am afflicted to some extent with the residue of 10 years of service in the House of Representatives, and I am certain that, given the gracious way in which this committee plans to treat my proposed budget, I will alter my views once we have been through the process this year. [Laughter.]

Mr. Chairman, I would like to submit a statement for the record and then basically present a summary, if I might, this morning.

Chairman NUNN. Without objection, your entire statement will be made part of the record.

Secretary CHENEY. Thank you, Mr. Chairman.

It is good to appear before this committee again. The last time I was here, of course, was for my confirmation hearing. But it has been a total now of some 47 days since I took over as Secretary of Defense, and the bulk of that time has been devoted to personnel questions and preparing the budget.

As you mentioned, Mr. Chairman, it would have been indeed more pleasant and perhaps more orderly to have had the time to complete the strategic review that is now underway before we had to make these budget decisions and present a package to Congress. Of course, that simply was not possible. We did, to some extent, rely upon the work of the strategic review panel as we put the budget together. Certain decisions, like those involving SDI and ICBM modernization, for example, came out of the strategic review process and went to the President for final resolution through the normal national security process.

Mr. Chairman, this budget has been prepared at a time when obviously we are faced with the potential for significant changes in U.S.-Soviet relations. There is a great ferment in the Soviet Union. I recently had the experience of sitting in my office at the Pentagon and visiting with the Soviet Ambassador about election returns inside the Soviet Union—a whole new experience for me, one I never thought I would have. We have seen a serious effort, I think, by Mr. Gorbachev to alter the internal arrangements in the Soviet Union in connection with his efforts to try to reform the Soviet economy. He certainly gives every appearance of having a more benign attitude toward the West than has been true of many of his predecessors.

We have seen in Poland the recognition of Solidarity, the scheduling of free elections. We have seen economic ferment in Hungary and certainly throughout the Soviet Union. We have seen developments in terms of activities of ethnic minorities and efforts at political and economic reform that very few of us would have ever anticipated.

Having said all of that, though, I think it is important to remember what all of this may or may not mean with respect to U.S. policy in the future. The intentions of Mr. Gorbachev may indeed be benign or certainly appear to be benign at present. However, my job as Secretary of Defense is to worry about Soviet capabilities, and Soviet capabilities from a military standpoint are basically undiminished as we meet here today. We see a constant, steady upgrading and modernization of their nuclear forces. Their conventional capabilities are formidable, and while we are beginning to see the first follow-through of his commitment last December to reduce some of the levels of forces in eastern Europe, the bottom line is that it is far too soon for the United States to make a decision based upon what may or may not ultimately transpire inside the Soviet Union to significantly reduce our own vigilance or reduce our own level of commitment in the military area.

There has been great debate within our society over how we should react and respond to these changes and perception of a reduced threat on the part of the Soviets. There are obviously significant strains within the NATO alliance with respect to how we should respond and what our policies should be. There is the debate over whether or not the changes that we see working in the Soviet Union today are the result of historically inevitable forces or the work of one man. Of course, there is the serious question about whether or not the policies currently being pursued, apparently more peaceful in their intent, could easily be reversed at some point down the road by the Soviet leadership.

I think the requirement is, more than anything else, for U.S. policy to be firm and consistent, to seek reductions in armaments but to do so carefully and cautiously within the framework of our alliance. This is not the time for us to unilaterally reduce our commitments or our own capabilities. Such reductions must only be taken in a careful, step-by-step process in conjunction with our allies and as a result of agreed-upon procedures for reduced Soviet capabilities as well.

You mentioned the budget cuts that we have been through in the last couple of years. Mr. Gorbachev has gotten a lot of mileage out of promising a 14.2 percent reduction in the defense budget of the Soviet Union. Of course we do not have enough information to know the base on which that 14.2 percent reduction would be determined. The fact is, if we take the budget that I am presenting here today, if it is implemented—and I assume it will be in some form—then we will have reduced U.S. defense spending over the last 5 years, already completed reductions, by some 12 percent in real terms.

The situation with respect to key items, for example, the Soviets are still producing some 3,500 to 5,000 tanks per year. Our level of tank production is about 600 per year. You can go down a long list of requirements and clearly see that Soviet capabilities are significant, that modernization efforts continue at a fast pace, and while there may indeed be the perception of reduced threat in the West, where Mr. Gorbachev is concerned, the bottom line is, there is no evidence at this point that would warrant a significant reduction in our own level of activity and capabilities.

The task at hand, Mr. Chairman, is budget cuts. Former President Reagan submitted a budget in January that called for 2 percent real growth. President Bush reduced that in February to 0 percent real growth. A majority in the Congress recommended in the budget negotiations minus 2 percent real growth. We finally ended up with a compromise of approximately 1 percent real decline in defense spending for fiscal year 1990. As you pointed out in your opening remarks, that is about a $10 billion cut in fiscal year 1990 in BA and a cut of almost $65 billion over the course of the 5-year defense plan.

Since January 1987, just a little over 2 years ago, the reductions in defense spending over the period from fiscal year 1988 to 1994 have totaled $373 billion. That is a massive amount of money. Stated another way, if the original 5-year defense plan that was approved in 1986 had been implemented—and remember 1986 is the first year that we had numbers for fiscal year 1990 in the FYDP—if that original budget had been implemented and we had bought everything that we said we were going to buy and fully funded everything we expected to in 1986, we would be here today talking about a budget of approximately $479 billion. Instead, the budget I am presenting to you today comes in at approximately $305 billion, over $170 billion less than what we had anticipated in 1986.

What that means, Mr. Chairman and members of the committee, is there is no way to cut the budget without cutting the budget. These are not easy cuts. The easy items have already been taken out. My predecessor, Mr. Carlucci, made decisions during his tenure as Secretary that took out over $300 billion in defense spending. I have accused him subsequently of cutting the easy stuff; he said it was very hard to make those reductions and I am sure he felt the same way I do today. It is very painful. It is not painless. I do not know any painless way to do it. Many of my former colleagues have been only too eager to demand reductions in the aggregate level of defense spending as part of the process for solving our overall budget problems. But then they are very quick to contact me to urge that I not close their base or cut back on procuring some item built in their district or cancel their favorite weapons system.

There is not any way I can do this job or follow through on the commitments that I have made based upon the agreement between the President and Congress on overall defense spending without breaking some china, offending some of my friends, and creating problems that obviously are going to be debated in both bodies as we put the budget together for fiscal year 1990.

In 10 years as a Member of the other body, I voted for virtually every proposal to increase defense spending, and for virtually every proposed new weapons system. Now, as Secretary, it is my job to figure out a way to pay for all of it and to fit it all, if you will, into a shrinking budget. It is a lot like trying to put 10 pounds of defense spending into a 9-pound bag; it does not fit unless you make some cuts and eliminate some programs.

I cannot claim that the budget we are presenting to you today is written in stone. It certainly is not. We did the best we could on short notice in accordance with some broad principles and philosophy that I will talk about in a minute. It is certainly my hope that Congress will be able to improve upon the package that we have recommended. There is certainly no monopoly on wisdom or advice in the Pentagon, and I am only too eager to work with the Members of the Senate and the House as we try to wrestle with the difficult problems of deciding how we try to maintain our defenses in the face of steadily declining budgets.

Philosophically, Mr. Chairman, I proceeded on the basis that it was better to cancel programs outright than it was to reduce force structure, to reduce readiness and sustainability, and to maintain the fiction that somehow we could maintain as large a force as we had in the 1980s while in fact what we were doing was reducing the capability of those forces. I strenuously resisted every chance I had to make the decision to go back to the so-called hollow forces of the 1970s.

My priorities were roughly as follows: My first priority was people. The item that I am struck with more than anything else as I visit with both the troops as well as their senior commanders who have been in the service a long time, such as Admiral Crowe, is that the quality of the force today in terms of the people who are serving in all branches of the military is as good as, if not better, than it has ever been. Those of you who have had the opportunity to spend time out with the troops I think would in fact verify that this is the case. But it strikes me that this is a very, very fragile kind of a balance. I will come back in a minute to talk about why it is so important. But the people questions, people issues, quality of life issues that I put foremost, are absolutely essential to retaining the best people we could if we were going to maintain a quality force; second was to preserve the forward-deployed strategy that has been important in recent years; third was to maintain the readiness of those forward-deployed forces; fourth was strategic modernization; and fifth was to procure at efficient rates—that is to say to maintain as great efficiency as possible in terms of how we actually bought systems.

In terms of personnel, I steered clear of all cuts that would have reduced our ability to recruit and retain first-class people. That means there are pay raises in the budget. Those were proposed in the prior budget submitted in January and they are still in the budget. We have supported incentive pay and quality of life issues, et cetera. I think it is important to emphasize this in part and remind my colleagues that we are operating in a full employment economy and that we have a shrinking pool of 18-year-olds. Any slight indication that we are not prepared to provide the kinds of incentives that are required to attract and retain first class people I think would tip us over into the kind of situation we faced all too often in the past where we did not have top-flight people willing to serve.

With respect to the forward strategy proposition, I resisted any significant reduction in U.S. deployments overseas. There was one exception that I will talk to when we get to the question of force structure reductions.

There is a basic proposition worked out in accordance with the President and other administration officials. We avoid the proposition, for example, that we ought to significantly reduce our presence in Europe, especially in light of the ongoing negotiations on conventional force reductions with the Soviet Union, and now is not the time for us to move outside the framework of the policies that have been agreed to within the alliance.

With respect to readiness, I rejected proposals from the services to cut back on flying hours or operational hours of our armored vehicles on the belief that readiness is obviously key in terms of the quality force, but also that readiness plays very significantly as a people issue. If you sit down and talk to Navy carrier pilots and ask them the number one item for them in the decisions they make whether or not they will stay in the force, the question that always comes back to you is cockpit time, flying hours. That is why they are in the Navy. That is why they like to fly. That is why they are willing to stay. Some proposals that would have cut back our operations tempo and would mean we would have been exercising less were rejected. I do not think it is surprising that people who serve in the military on a professional basis and develop professional skills want to practice what they have learned. So I have really looked at readiness more than anything else significantly as a personnel question.

On strategic modernization, most of you have seen what was worked out with respect to the Trident and the D-5 missile. Those programs will continue unchanged, although I am sure you are aware there has been a 3-month slippage in the IOC on the D-5 missile while we make a technical fix. I rejected proposals from the Navy to cancel out two Tridents.

The B-2 bomber is a major item about which there has been a good deal of debate. I am not comfortable, Mr. Chairman, that I have my hands firmly around the B-2 program. I think there are a lot of questions with respect to cost data, a lot of questions about how the program ultimately is going to work out in terms of what it will cost. I find differences within the Department over what those cost estimates are. I have asked for a Defense Acquisition Board (DAB) review of the cost figures with respect to the B-2 and expect to have that completed by the end of May. I simply raise that as a red flag today. The decision I took with respect to the budget was to postpone or delay, if you will, the schedule on the B-2 by 1 year. I think that is a fact of life change, given the complexity of that technology. It also saves a lot of money in the near term and it will allow us the time to take a good hard look at the B-2 program through the DAB process.

With respect to land-based ICBM modernization, the President made a decision that he wants to go with both the Peacekeeper rail garrison system and the Small ICBM. Peacekeeper rail garrison gives us a mobile system at the earliest possible date for the least amount of money. We in effect can deploy some 500 warheads in a survivable mode with an initial operational capability (IOC) of fiscal year 1992.

The problem, of course, that we face on ICBM modernization is one of cost. It would be nice if we had all of the resources we wanted to be able to develop simultaneously both rail garrison and the Small ICBM, as many have suggested. The problem, as you pointed out, Mr. Chairman, is that the 1990 outlay figure is very tight. The best we could do in terms of squeezing money out for the fiscal year 1990 program with respect to the Small ICBM was approximately $100 million. So, in effect, what we have proposed is that we sequence the two systems. First, we go with the rail garrison and move rapidly now to deployment. We keep the Small ICBM alive and then ramp up on the expenditures on the Small ICBM in the outyears as we complete the rail garrison buy.

That is not a perfect spending profile. We may want to come back to you later on or the committee may even want to consider in its deliberations this year as we go through this cycle the possibility of changing the specific profile we have recommended. The profile is budget-driven. It is $100 million in fiscal year 1990, $200 million in 1991, $250 million, $300 million, and $350 million. The result of that budget-driven profile is to operate at less than the most efficient rate in terms of developing the program, but again if we are going to try to do both systems we felt that that was the best way to go. But we may be able to develop or refine that proposal as we go through the process.

What this will give us obviously is mobility in the ICBM force. It will break the 10-year impasse over how we should deal with the vulnerability of our land-based missiles. Assuming we were to go with 500 Small ICBMs as well as the 500 Peacekeeper warheads, once the programs were complete, we would have 1,000 survivable warheads with strategic warning. The President has decided that is what he wants to do and that is the proposal we are putting before you today.

In addition to ICBM modernization in the strategic program, we continue work on the advanced cruise missile.

On SDI, the Strategic Defense Initiative, we had to make some other difficult changes. I think most of you know I have been a strong advocate of SDI. President Reagan proposed at the end of his administration a funding level on SDI for fiscal year 1990 of $5.6 billion. What we have put before you today is $1 billion less—that is, $4.6 billion—for fiscal year 1990.

The total over the 5-year plan, instead of the $40 billion recommended by President Reagan, will actually be $33 billion as proposed by President Bush. This will allow us to continue a robust program for strategic defense, to continue work on both the space-based and ground-based phases of the program, and to place special emphasis on researching the feasibility of the so-called "Brilliant Pebbles" concept over the course of the next year or two.

With respect to efficient procurement, as a general proposition a number of proposals came to my desk as we put the budget together to stretch out the buys on various systems—that is, to save money in the near term by reducing the rate at which we procured various systems. For example, the Army proposed stretching out the buy on the AH-64 Apache helicopter. The result of that proposal would have been to increase the unit cost of each Apache helicopter from $12 million to $19 million. I rejected that proposition.

We had other stretchout proposals on the Abrams, on the Bradley, and various other systems.

Where we did have complex technologies and fact of life problems with respect to developing systems then I did in fact agree to delay, as I mentioned with respect to the B-2. But as a general proposition what we tried to do was to see to it that we will continue to operate at the most efficient rate possible and, as I say, to do that you end up then making decisions that you have to cancel or close down some programs. That is where we get to the tough part.

So let us go ahead and start with the charts here.

FY 1990/FY 1991 DoD BUDGET

(Current $ Billions)

	1989	1990	1991	1992	1993	1994	CUM 90-94
BUDGET AUTHORITY							
January Budget	290.2	305.6	320.9	335.7	350.7	365.6	1,678.5
Delta	-	-10.0	-9.9	-13.7	-14.8	-15.8	-64.2
Amended Budget	290.2	295.6	311.0	322.0	335.9	349.8	1,614.3
OUTLAYS							
January Budget	289.8	293.8	304.7	316.2	329.3	343.4	1,587.4
Delta	-	-4.0	-6.9	-9.4	-11.9	-13.9	-46.1
Amended Budget	289.8	289.8	297.9	306.8	317.4	329.5	1,541.3

This gives you an overall comparison that I have talked about previously with respect to fiscal year 1990. The top line is the January budget; the amended budget is the third line down.

FY 1990/FY 1991 AMENDED BUDGET

BUDGET AUTHORITY BY TITLE
(Current $ Billions)

	FY 1990			FY 1991		
	January Budget	Adjustment	Revised Request	January Budget	Adjustment	Revised Request
Military Personnel	79.8	-0.7	79.2	82.1	-0.8	81.3
O & M	91.7	-1.5	90.2	95.5	-1.5	94.0
Procurement	84.1	-5.4	78.8	91.9	-4.7	87.1
R D T & E	41.0	-1.5	39.5	41.3	-1.8	39.5
Military Construction	5.3	-0.5	4.8	5.9	-0.3	5.6
Family Housing	3.3	*	3.2	3.7	-0.1	3.6
Other	0.4	-0.6	-0.2	0.6	-0.8	-0.2
TOTAL	**305.6**	**-10.0**	**295.6**	**320.9**	**-9.9**	**311.0**

* Less than $50 Million.

This will show you roughly where the bulk of the cuts come. As you can see, of the $10 billion in fiscal year 1990, $5.4 billion comes out of procurement. Military personnel cuts basically are a reflection of the force structure reductions, which I will talk about more in a minute. But clearly procurement took the bulk of the hit with respect to the 1990 reductions.

FY 1990/FY 1991 AMENDED BUDGET

BUDGET AUTHORITY BY MILITARY COMPONENT
(Current $ Billions)

	FY 1990			FY 1991		
	January Budget	Adjustment	Revised Request	January Budget	Adjustment	Revised Request
ARMY	80.5	-1.7	78.8	84.1	-2.2	81.8
NAVY	101.7	-3.9	97.8	105.1	-1.9	103.1
AIR FORCE	100.5	-2.7	97.7	106.6	-3.6	103.0
DEFENSE AGENCIES	20.3	-1.3	19.0	22.3	-1.4	20.9
DEFENSE WIDE	2.6	-0.5	2.1	2.9	-0.8	2.1
TOTAL	**305.6**	**-10.0**	**295.6**	**320.9**	**-9.9**	**311.0**

This shows the changes in the budget with respect to the various military components. I did not make decisions based upon the notion that everybody had to take a pro rata share. I think the Department has operated that way in the past but I felt strongly that I should not simply ding every service an exact percentage of their programs on the grounds that the dollars should not have been allocated that way in the first place. I wanted to look at it program by program, category by category.

But the net result is, I do not think anybody was significantly discriminated against if you look at the overall cut. I have been accused of hitting the Navy pretty hard. The Navy's share in fiscal year 1990 has dropped from 33.3 percent of the budget to 33.1 percent of the budget. The Air Force share is up by one-tenth of one percent. So it has not done gross violence to the arrangement certainly. The large Navy reduction obviously reflects the decisions on the V-22 and the F-14D aircraft and the 688-class submarine which I will come back to in a minute.

DEPARTMENT of DEFENSE MANPOWER

(END STRENGTH IN THOUSANDS)

	FY 1990	FY 1991
MILITARY ACTIVE DUTY		
FY 1990 BIENNIAL REQUEST	2,138	2,135
ARMY	-8	-8
NAVY	-6	-6
MARINE CORPS	-	-
AIR FORCE	-3	-
TOTAL ACTIVE DUTY REDUCTIONS	-17	-14
FY 1990 AMENDED REQUEST	2,121	2,120
SELECTED RESERVES		
FY 1990 BIENNIAL REQUEST	1,178	1,182
REDUCTIONS	-	-
FY 1990 AMENDED REQUEST	1,178	1,182
CIVILIANS		
FY 1990 BIENNIAL REQUEST	1,104	1,101
REDUCTIONS	-1	-1
FY 1990 AMENDED REQUEST	1,104	1,100

The situation with respect to manpower is, as you can see, up there. We ended up overall with a reduction of about 16,000 slots in the total manpower in the force, fiscal year 1990, as amended.

FORCE STRUCTURE CHANGES
($ in Millions)

	FY 1990 Changes		FY 1991 Changes	
	Dollars	Manpower	Dollars	Manpower
ARMY				
Deactivate 1 Active Mechanized Brigade/ Cancel Activation of Selected Units	-91.3	-7,929	-197.7	-7,929
Restructure Army Attack Helicopter Units	-2.1	-	-15.9	-375
NAVY				
Retire the USS CORAL SEA	-53.3	-1,257	-106.6	-1,418
Accelerate Retirement of Destroyers	-74.3	-3,357	-108.6	-2,709
Deactivate 73 P-3A/B Aircraft	-67.7	-876	-77.5	-876
Transfer 10 Frigates				
From the Active Forces	-29.7	-676	-70.6	-1,690
To the Reserves	+ 28.9	+ 696	+ 55.9	+ 1,740
AIR FORCE				
Deactivate WC-130 Hurricane Reconnaissance Aircraft	-14.0	-439	-6.2	-
Restructure TR-1 Program	-4.8	-71	-3.5	-70

Force structure changes. Let me spend a few minutes on this chart because I think it addresses perhaps some of the most controversial issues with which we have to deal.

I mentioned earlier the decisions that I had to make on the forward-deployed units. The one exception to that is the change that will occur with respect to the personnel who had been assigned to the Pershing II program in Europe. In effect what I said to the Army was that they had to give up the 8,000 slots assigned to INF forces that were no longer going to be deployed by virtue of that agreement, but that they did not have to take all of those cuts out of Europe or any one location.

They came back with a proposal, which I approved, that we deactivate one mechanized brigade, the Fourth Division at Fort Carson, Colorado. We will fill out that division with a round-out Army National Guard brigade. In addition, approximately 4,000 slots will come out of Europe. These are slots that had previously been assigned to the Pershing II forces, so we are not reducing any of your conventional force structure that was in Europe.

You can also see some force reductions with respect to the Army in terms of the Apache helicopter units. One of the things that I have decided to recommend is to terminate the Apache buy after fiscal year 1991. That results in some changes and restructuring with respect to our helicopter units, which is reflected in the proposed personnel changes.

With respect to the Navy, one of the toughest decisions I had to make was the decision to stop with 14 aircraft carrier battle groups. The plan, you may remember, had been to go to 15. We were at 13 until 1988. In 1988 the *Roosevelt* came into the force and that moved us up to 14, and we are slated now to go to 15 next year. What I said to the Navy was that we will leave our overall total number of carrier groups at 14. To do that we retire the *Coral Sea* early and we will ultimately have to retire the *Midway* early as well when the new carriers go into the force. That does allow us some significant savings, obviously, in O&M as well.

One of the main things I was concerned about, the argument that is always raised when you start to talk about cutting carrier groups, is commitments. Will we be able to keep our commitments? Let me point out to the committee that we are talking about staying where we are right now. We have been able to keep our commitments in 1988 and 1989 and do it with a very important additional restriction, which is no more than 180 days deployed at sea, on any one deployment. We find that when you get over about 180 days at sea—and we did this a few times in the early 1980s when we had no other choice—you have a significant problem in terms of retaining people. Once these ships come back to port after they have been at sea for 210 or 220 days, a lot of folks decide they would rather find another line of employment. I have issued an order, an instruction in effect, in conjunction with the Chairman that says no deployment—except in extraordinary circumstances—will be longer than 180 days. I am convinced that with 14 carrier groups, that requirement, and the battleship supplement, we can in fact maintain our commitments. Therefore, I have decided to recommend to the committee that we leave our carrier groups at 14.

We are going to retire the DDG–2s and 37s destroyers early. Those are some of our least capable forces. They were scheduled to come out of the force anyway. We are going to accelerate those retirements.

We are deactivating some of the P–3 aircraft. I can go into more detail on that if you want. We will get rid of 73 of the As and Bs. We will maintain 24 active and 3 reserve P–3C squadrons. The reserves will also operate with 10 squadrons of P–3B aircraft. Again, this reduces some of our least capable forces. The FF–1052 frigates will be transferred from the Active Forces to the Reserves as well.

Force reductions in the Air Force include the WC–130 Hurricane reconnaissance unit, which I will be happy to talk about. I anticipate we will get some questions on that. We will make some minor changes in the TR–1 program which, of course, is classified.

PROGRAM TERMINATIONS
(Current $ Millions)

	FY 1990		FY 1991		FY 1992-1994	
	Quantity	Dollars	Quantity	Dollars	Quantity	Dollars
ARMY						
AH-64 Helicopter (after 1991)	-6	-38	-6	+ 17	-144	-1,846
AHIP	-36	-299	-36	-328	-96	-1,072
M88 Recovery Vehicle	-	-3	-78	-90	-137	-255
NAVY						
V-22 Aircraft	-12	-1,223	-24	-1,395	-157	-5,073
F-14D Aircraft	-12	-365	-12	-469	-36	-1,522
PHOENIX Missile	-	-	-420	-333	-406	-281
SSN-688 Submarine	-1	-714	-	-	-	-
AIR FORCE						
F-15 Aircraft (after 1991)	-	-11	-	+ 552	-78	-3,620
LANTIRN Pod	-	-82	-	-31	-	-

Dollars include RDT&E, Procurement and Procurement Spares.

Program terminations is another area where we deal with difficult problems. These are programs that were already on the books and in many cases have been very successful procurements for us. What we have done in several areas is try to look at a package, if you will. For example, I mentioned earlier that the Army's original proposal was to stretch out the buy on several systems in order to keep doing everything we were doing with respect to Army aviation.

The decision I made was to go ahead and buy out the AH-64 Apache helicopters, then terminate the program after 1991.

The AHIP, you may know, is the OH-58 upgraded helicopter. It has the mast-mounted sight on it. It is a very nice piece of equipment. It would be nice to have more of them. Once we complete those that have already been obligated, we will have 207 in the force. I decided to terminate the AHIP program effective immediately as well, and place the major emphasis of Army aviation with respect to future funding on development of the LHX, the next generation helicopter which was the Army's priority. To do that you have to make some choices in terms of current procurements, and that is the package we made.

The M-88 recovery vehicle is a tank recovery vehicle. I could not find anybody in the Department who thought the program had worked out very well and I basically canceled that program as well.

In the Navy the V-22 was probably the toughest decision I had to make. It has certainly been the most controversial, if the pounds of newsprint devoted to stories about the V-22 are to be believed. I am not here today to criticize the V-22. A lot of folks may have thought that I believed there was some fundamental flaw in the program. I do not. The problem is affordability. If you do not cancel something, then you end up stretching it out and you end up raising the cost of everything we buy. That is absolutely the worst possible way to go about trying to reform procurement and acquisition in the Pentagon. I concluded that it was far more appropriate to move aggressively to cancel the program rather than to get into the business of fouling up all the other programs that are still there. Based upon the best advice I could get within the Department, while the V-22 would be a nice capability, has some potential commercial applications, and is of great interest to the Marine Corps, in my judgment, it was not of sufficient priority to keep, given the budget problems I am facing. And we had to make the decision about whether or not we went to full-scale procurement on the V-22. The result is a recommendation to you that we terminate that program.

The F-14D, of course, is the latest generation of the F-14. The F-14 is a fantastic airplane. Everybody has seen Top Gun. It is the backbone of our Navy fighter force. It is a first-class aircraft. We in effect have two production lines going at present. One was to manufacture new F-14Ds at Grumman, at the rate of one a month. The result of that production rate of only 12 aircraft a year is to significantly raise the cost of every aircraft. Depending upon how you compute the cost, those airplanes are going to cost us anywhere from $51 million to $75 million per copy—not a very efficient way to do business. The other operation is to remanufacture F-14s, and Grumman also has that contract. We will go full speed ahead with that program. We will start the remanufacturing process and do a total of 150 remanufactures over the course of the FYDP and be up to a rate of about 60 per year by fiscal year 1994. That is new engines and gives us a first-rate piece of equipment but at about half the cost of producing a brand new one. It was a difficult choice. We would like to have that F-14D new production line in business. But in this case I made the decision to scrap it.

The Phoenix missile, of course, goes on the 14D. Its cancellation is a reflection of that earlier decision.

On the SSN-688, the Navy came in with a proposal to drop one of the SSN-21s new Seawolf submarines. I reviewed that decision and decided that, rather than do that, I would cancel the last of the 688 buy. We are scheduled to buy two more 688s. I canceled one of those 688s on the grounds that the 21 was a lot more capable than the 688 is, and was a better long term alternative in terms of the overall quality of the force. So we scrubbed one 688.

For the Air Force, the line you see there basically is to terminate production of the F-15E aircraft after we buy a total of 200 after 1991. The Air Force currently has three wings established with respect to the F-15. Certainly you have enough aircraft for at least two good wings and plenty of spares. Again, that is a decision based upon affordability as much as anything else. It is a good aircraft. This is the F-15E, the long-range version. Again, it is a decision that is made as much as anything because of affordability but also because we will have 200 of these aircraft in the force by then.

The LANTIRN, of course, goes on the F-15.

FY 1990/FY 1991 PROGRAMS RESCHEDULED

(Current $ Millions)

	FY 1990 Changes		FY 1991 Changes	
	Quantities	Dollars	Quantities	Dollars
ARMY				
ADATS Missile	-234	-129	-406	-114
ATACMS Missile	-124	-46	-	+ 10
UH-60 Helicopter	-11	-58	-11	-44
NAVY				
SH-60F Helicopter	-18	-220	-	-
T-45TS Aircraft	-24	-293	-24	-182
F/A-18 Aircraft	-6	-156	-6	-74
COASTAL MINEHUNTER	-2	-110	-	+ 41
AIR FORCE				
B-2 Bomber	*	-1,102	-	-2,865
TACIT RAINBOW Missile	-	-	*	-30
National Aerospace Plane 1/	-	-200	-	-390
DEFENSE AGENCIES				
SDIO	-	-991	-	-1,271

* Quantities Classified.

1/ Legislation is proposed to provide $100 million to NASA in FY 1990.

Dollars include RDT&E, Procurement and Procurement Spares.

The other changes you see here are not nearly as significant. I will be happy to get into some of them. You can look at the Army programs. These are the rescheduled programs where we altered the production rate or slipped the effective dates in many cases.

The SH-60F helicopter, for example, is the dipping sonar helicopter. We have had problems. It has not lived up to its requirements and has not met the test. So we have made modifications and changes there.

I talked already about the B-2.

The National Aerospace Plane (NASP) was another difficult decision. There is a lot of support for NASP. It was scheduled to be in the budget for $300 million. In effect what I am recommending to the committee is that we cut $200 million out of that, leave $100 million in the program, and ship the whole package over to NASA. This action will require legislation. There will have to be an amendment to the authorization act. NASA is scheduled to put $127 million into the program. The rationale here is that there is no immediate military application for the program. It is a research program. It has a lot of potential. I first got involved with it several years ago when I was a member and it was still operating under DARPA. But I could not justify leaving it in the budget under those circumstances.

PROPOSED PROGRAM REDUCTIONS NOT ACCEPTED

MYP

716	HAWK Missiles,
2,072	PATRIOT Missiles,
18	C-17 Aircraft,
504	M-1 Tanks,
185	BRADLEY Fighting Vehicles.

ECONOMIC PRODUCTION RATES

1,660	AMRAAMs,
240	MK-48 ADCAPs,
637	MK-50 Torpedos,
200	TOMAHAWK Missiles,
150	F-16 Fighter Aircraft.

HIGH PRIORITY SYSTEMS

*	Advanced Cruise Missiles,
45	TRIDENT Missiles,
2	TRIDENT Submarines,
3	ROTHR Radars

* Quantities Classified.

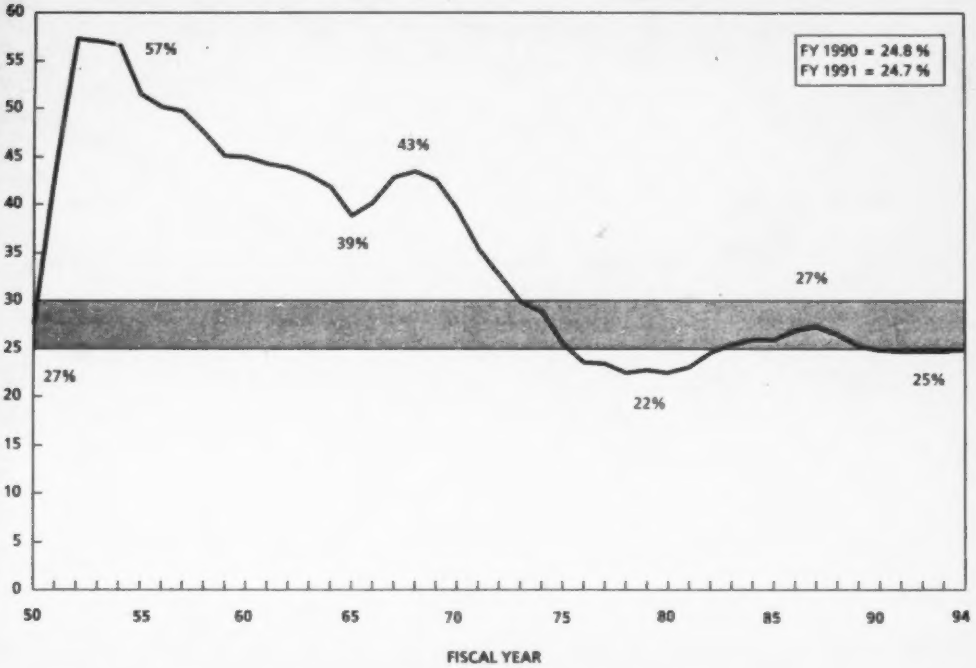
Of course, the bottom one is the SDI cut which I have already mentioned.

It is also interesting what I decided not to cut, to give you some idea of the rationale as we went through the process. The Hawk and Patriot missiles are familiar to you. Proposals came in to cut those systems. Based upon what I think their importance and priorities are, I did not cut them.

There was a proposal to defer the C–17 aircraft. As I look down the road from a strategic standpoint, and we think about what our worldwide commitments and obligations are going to be, or if we get into a situation where we end up drawing down our forces in Europe as a result of a negotiated agreement with our allies and with the Soviets, mobility becomes even more important than it already is. On that basis I decided not to slow down or tamper with the C–17 program.

I already mentioned the Abrams and Bradley proposals for reductions or stretchouts which I rejected.

I think the rest of those systems are relatively self explanatory.

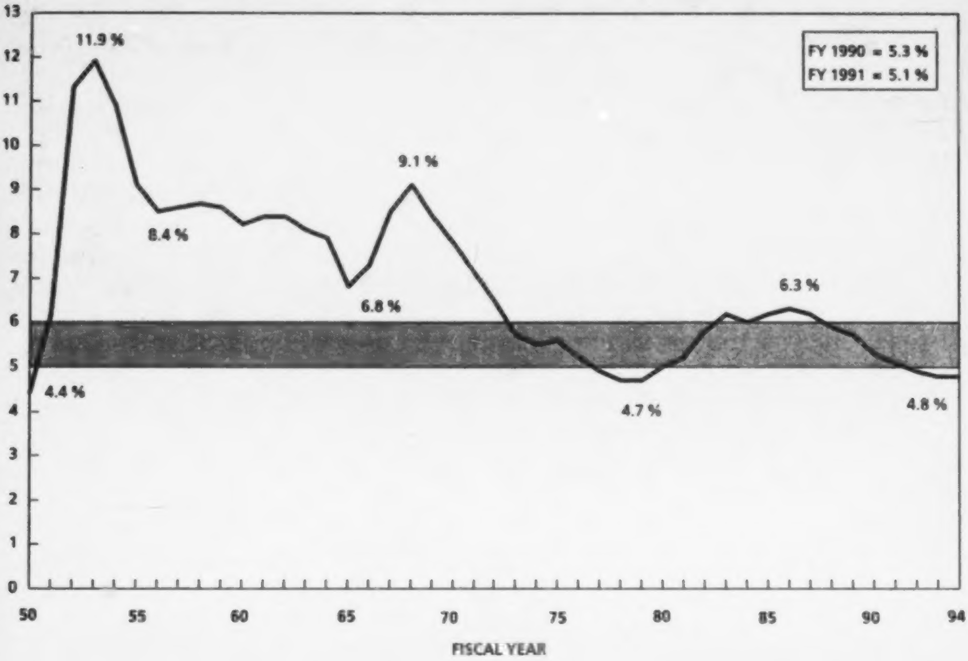


Defense as a Share of Federal Outlays

Finally, Mr. Chairman, in wrapping up my testimony, I think these last two charts are significant. The first one shows defense spending as a share of Federal outlays, and you can see over to the right where we are in the FYDP that is before us today.

If we go back to the 1950s, we had defense as a share of Federal outlays of over 50 percent during the Korean war. There had been a steady decline until a brief period in the late 1960s during Vietnam. We were down to 22 percent in the late 1970s and 1980. Then we had a bit of a ramp-up and now we are back down to under 25 percent during this FYDP—that is, less than 25 percent of the Federal budget going for defense.

Defense Outlays as a Share of GNP



The final chart shows defense outlays as a share of the gross national product. Again, you can see the cuts that we are being forced to take and, to reinforce the views that were voiced by the chairman in his opening remarks, this is the fifth year in a row that we have had a real reduction in defense spending. The result is that we have gone from a peak in the mid-1980s of about 6.3 percent of the gross national product being expended for defense to where, by the end of the 5-year plan that you are looking at today, we will be down under 5 percent of GNP for defense, back to 4.8. That is almost as low as we were back in the late 1970s when we had significant problems in terms of our overall military capabilities.

Chairman NUNN. Where are we right now on that chart? What percent are we spending right now?

Secretary CHENEY. Right now we are just below 6 percent—5.3 in fiscal year 1990, down to 4.8 by 1994. Now more than anything else, I think this reflects the Nation's capabilities of when we decide to do it. Back in the 1950s and 1960s we spent a great deal more as a share of our gross national product on defense than we are asking for this year. I do not believe spending 5 percent of our gross national product is an excessive request.

The final point I would ask to make, Mr. Chairman is, I have not yet figured out how to get more defense capability for less money. Maybe there is a way to do it and maybe after I have served over there in the Department long enough we will be able to come back to you and say, if we do the following things we can save money, we will be more efficient, and we will be able to do a better job of providing for the Nation's defense with the resources the taxpayers give us than has been true in the past.

The bottom line, especially on this first go-round, is if we cut the budget and we cut defense spending, we cut military capability. I do not know any other way to do that, and I think I would be misleading the committee and the public if I did not come forward and be perfectly frank and honest in terms of that basic fundamental fact of life. I recognize that some of the decisions I made are controversial. Other members, in a perfectly honest approach, looking at the choices I had to make, would make different choices. We did the best we could under the circumstances and I hope my colleagues and friends will understand I do not take any pleasure in having to be here today advocating these cuts and reductions. I am here because that is the only choice that is before us, because the President and Congress have made a decision about what the level of defense spending is going to be, and on that basis we have taken the cuts that I presented to you today. Thank you very much.

[The prepared statement of Secretary Cheney follows:]

STATEMENT OF SECRETARY OF DEFENSE RICHARD B. CHENEY IN CONNECTION WITH THE FY 1990/FY 1991 AMENDED BUDGET FOR THE DEPARTMENT OF DEFENSE

INTRODUCTION

Mr. Chairman, Members of the Committee:

It is a great pleasure for me to come before this Committee to provide the details of the Administration's defense budget for FY 1990 and FY 1991.

We begin this Administration at a time of significant opportunity. Changes in international conditions appear very promising, and opportunities exist for lessening tension and achieving meaningful arms reduction to bring about a more peaceful and prosperous world as we approach the next century. Economically, the United States is doing well, while many nations that have not embraced a free-market economy are in retreat. In foreign policy, our recent buildup in global military strength is paying high dividends. The Soviet Union, beset by economic difficulties, has withdrawn from Afghanistan, may be on the brink of significant troop reductions in Eastern Europe, and has proposed major changes to its internal political structure. These conditions are due, at least in part, to the success of U.S. and allied strategy--"strength secures peace."

Our nation also faces new challenges to our security: to preserve and enhance our revitalized military capabilities in the face of ever more sophisticated threats while, at the same time, living within demanding fiscal constraints; to stop the spread of international terrorism; and to maintain a consistent and effective military strategy during a period of international political uncertainty.

DEFENSE STRATEGY

Our principal national security objective is the protection of the United States as a free nation with its fundamental institutions and values intact. Together with our allies we seek to deter aggression by maintaining forces that are capable of responding effectively to the most serious threats, while remaining flexible enough to deal with lesser threats to our collective and national interests. Some argue that the change taking place in the Soviet Union is significantly reducing the threat to our security and therefore, we can afford to lower our own level of vigilance. This position presumes that the initiatives proposed by Mr. Gorbachev represent a fundamental and lasting shift in Soviet policy. Certainly we all hope that these efforts are successful and contribute to a lessening of tensions worldwide. However, we cannot afford to react unilaterally to political rhetoric and proposals that have not yet been fully implemented. We have major questions about Soviet reductions, plans for restructuring their forces, and future military spending and production. It would be foolhardy or worse to respond to Soviet reductions with cuts of our own that would result in preserving their conventional superiority. Despite Mr. Gorbachev's pronounced commitment to a defensive military doctrine, the Soviet Union continues to improve its forces which are the largest in the world and outnumber those of NATO in most categories of conventional forces. Even after the reductions announced by the Soviets occur, the Warsaw Pact will still have more than a two to one advantage in tanks and artillery over existing NATO forces.

Changes to our force structure and military strategy should be made in response to clear and demonstrated long-term changes not only in the Soviet Union's political posture and rhetoric, but also in its military posture. I believe it is important to remain cautious in our reaction to the prospect of changes in the Soviet Union. We must adopt a stance that does not place us in a weakened position. Responding to announcements of future Soviet reductions in conventional forces in Central Europe is a case in point. The NATO proposal for dramatic conventional force reductions seeks cuts in the forces of both sides to equal levels. This approach would correct the current imbalance in conventional forces. A cautious approach will also allow us to seize favorable opportunities when they arise and enhance the opportunity for long-lasting peace.

Peace through strength remains the best deterrent to aggression, and has proven to be the key to successful arms reduction negotiations. The recent INF treaty and continuing serious arms negotiations with the Soviets are testimony to this premise. We must retain the maximum flexibility in our negotiating posture. We must not weaken our position at the bargaining table. Therefore, we must ensure that we are not forced to make further reductions in response to budgetary pressures without getting at least commensurate decreases through negotiations with the Soviets.

Additionally, acts of terrorism and other aggression in the Middle East and elsewhere present the United States and its allies with an increasing requirement for improved conventional capabilities applicable to all types of conflict. Failure to sustain the gains achieved through earlier investment may create problems that will take an inordinate amount of time and huge amounts of money to restore.

Our national strategy relies on our allies' major contributions to collective security. Because of a strong NATO alliance and treaties with Japan, South Korea, the Philippines, Australia, and other allied nations, we are able to achieve a level of deterrence and defense that would otherwise be unattainable. Achieving equitable defense burdensharing remains a high priority, and we are working with our principal allies in Europe and Asia to find new methods of maintaining a credible defense posture in an era of declining resources and multilateral arms reduction negotiations. Ongoing discussions are yielding positive results. One example of success in burdensharing is NATO's decision to fund the construction costs for the relocation of the U.S. 401st Tactical Fighter Wing from Spain to Italy. This year, Japan will increase its spending to a level of $2.5 billion for the support of U.S. forces there. By continuing to improve our security partnerships throughout the world, and encouraging our allies to share the burden of common defense, our combined strength will have significantly higher deterrent value than that of individual nations.

In today's changing world of emerging new economies, political uncertainties, and fast-paced technological change, our security policy and strategy must remain viable within the context of the changing international landscape, and our forces must be structured to meet a myriad of contingencies and risks. At the President's direction, a major Defense Strategy Review is underway. The results of the review will be of assistance in making major national security decisions in the coming years.

REVISED FY 1990/FY 1991 BUDGET

The Defense budget presented by President Reagan in January provided for 2 percent real growth and requested budget authority of $305.5 billion in FY 1990 and $320.9 billion in

FY 1991. President Bush proposed a one-year freeze in real growth for defense with the understanding that this reduced defense spending level would be part of a comprehensive plan to meet Gramm-Rudman-Hollings targets and incorporate reforms which bring stability to the budget process. He proposed real increases of 1 percent in FY 1991 and FY 1992 and 2 percent in FY 1993 to maintain a steady course in national defense. The bipartisan agreement with the Congress reduced the FY 1990 defense budget by an additional $3.7 billion.

Our current proposal represents a reduction in budget authority of $10.0 billion in FY 1990 and $9.9 billion in FY 1991 from the January level. These reductions are in addition to the $300 billion that my predecessor cut out of the FY 1988-FY 1994 program that was planned in January 1987. As a result of these adjustments, the budget now before the Congress requests budget authority of $295.6 billion in FY 1990 and $311.0 billion in FY 1991. Outlays are projected at $289.8 billion in FY 1990 and $297.9 billion in FY 1991.

No program was excluded from consideration during the budget adjustment process. Recommendations from the Military Departments, the Joint Chiefs of Staff, Defense Agencies, Commanders-in-Chief of the Unified and Specified Commands, and my staff were all considered by the Defense Resources Board which I chaired.

In the urgency surrounding these budget changes, we did not forget the primary purpose of the process: i.e., to plan, program, and budget for the military forces and capability necessary to ensure our security. Not only did we have to make hard choices, but we also had to make sure that they were the right choices. This desire to make the right choices guided our review.

Defense Priorities

My top priorities are quality people, forward strategy, readiness and sustainability, efficient procurement and strategic modernization.

The readiness and well-being of our uniformed personnel continues to be my highest priority. Our success in attracting and retaining high quality military personnel in recent years results largely from providing adequate and fair compensation and other incentives to encourage service in the armed forces. Therefore, great care was taken to protect military personnel programs from reductions that would endanger continued success in recruiting and retaining adequate numbers of quality military personnel.

Our military strategy requires that our forces be equipped and trained to operate in a variety of terrains, climates, and combat environments, and to deploy quickly to any location where they might be needed. In order to respond to aggression as far forward from our shores as possible, we maintain forces at bases in Europe and the East Asia/Pacific region while our naval carrier battle groups and amphibious forces are deployed to various areas ensuring freedom of navigation and protecting essential maritime trade. Because we cannot predict where we may need our forces, we also maintain extensive airlift and sealift capability and preposition equipment in forward areas for use by deploying forces.

Since I consider readiness as an interrelated issue with quality personnel, I have taken great care to maintain a high state of training, maintain adequate munitions and spares, provide adequate medical support and hold maintenance backlogs to a minimum.

Efficient procurement was protected by continuing the production of high priority programs at economic rates, continuing emphasis of the use of multiyear procurements (MYP), cancelling lower priority programs or those that could not meet cost or performance standards, and deferring others. In considering program stretchouts, we opted to stay with established weapons programs where production lines are operating efficiently rather than pursue the development of unproven technology.

We have continued the modernization of our strategic forces with the development of a new penetrating bomber, the procurement of TRIDENT submarines and D-5 missiles to replace the aging, less capable POSEIDON SSBNs, and the development of mobile basing for ICBMs in the early 1990s.

The adjustments we made to the budget were implemented within this context. We have had to cut a number of programs which offered potential but which we could not afford at this time. We were forced to cancel some ongoing programs, as well as some systems planned for future procurement. In addition, a number of development and production programs were rescheduled to accommodate the fiscal constraints dictated by the bipartisan agreement.

Force Structure

Adjustments

Changes to the structure of our forces were required to avoid unacceptable decreases in their effectiveness and capability. The Army will deactivate a mechanized brigade, cancel the planned activation of additional artillery units in Europe and restructure attack helicopter battalions in FY 1990/FY 1991. The Navy will transfer 4 additional frigates from the active Navy to the Naval Reserve in FY 1990 and 6 in FY 1991. The retirement of DDG-2 and DDG-37 destroyers has been accelerated from those planned in the January budget. In addition, the Navy will retire the USS CORAL SEA when the USS ABRAHAM LINCOLN enters the fleet in FY 1990. The Navy will also deactivate 73 older P-3A/B aircraft. The Air Force deactivates its WC-130 aircraft in FY 1990 and restructures its TR-1 program.

Revised Program

The revised budget continues funding of a 32-division land force including 18 active and 10 reserve divisions for the Army, and 3 active and 1 reserve divisions for the Marine Corps. The tactical air forces will include 35 tactical air wings for the Air Force and 15 carrier air wings for the Navy. Further, the decision not to add another deployable carrier at this time means that naval forces will remain at 14 deployable carriers, and by the end of FY 1991 will include 563 deployable battle force ships.

Manpower

Adjustments

The net change in military personnel resulting primarily from these force structure changes is a reduction of 16,800 and 14,000 personnel in FY 1990 and FY 1991, respectively, from levels supported originally in the FY 1990/FY 1991 budget. Army active strength was reduced by 7,900 in FY 1990 and by 8,300 in FY 1991 from previously planned levels. Navy active strength will be reduced by about 6,000 from the January budget levels in both years. Air Force active strength was reduced by 3,200 for FY 1990 and remains the same for FY 1991 compared to the January plan, primarily related to a more rapid phasing of strength reductions associated with previously approved force structure changes. Naval Reserve strength will increase by 1,200 reservists by FY 1991 to man the additional frigates. Strength levels for other reserve components were essentially unchanged. Civilian strength is reduced by about 1,000 in both years. We anticipate that further personnel reductions will be made to implement recommendations resulting from the Defense Management Review now in progress. Reductions of $286 million in FY 1990 and $434 million in FY 1991 are included for this purpose.

Additional savings were achieved in the Military Personnel accounts by adjusting scheduled special training of Reserve personnel in the Army Guard and Reserve. Also, improvement in the strength of the dollar relative to most foreign currencies since the submission of the budget in January has allowed us to project a reduction of $182 million in FY 1990 and $179 million in FY 1991 in the cost of overseas station allowances.

Revised Program

The amended budget requests $79.2 billion in FY 1990 and $81.3 billion in FY 1991 for the military personnel accounts. The revised active duty strength level in FY 1990 is 2,121,500 and 2,120,100 in FY 1991. The revised total manpower levels for our reserve forces are 1,178,200 in FY 1990 and 1,182,200 in FY 1991.

Although DoD has successfully manned its forces with volunteers for over 15 years, market conditions of a strong economy and a shrinking youth pool available for military service are making recruiting increasingly more difficult. To continue meeting military manpower requirements on a voluntary basis, we must provide competitive compensation, adequate family support, reasonable living and working conditions, and assistance programs for post-secondary education. Most importantly, military pay raises of 3.6 percent effective January 1, 1990 and 3.2 percent effective January 1, 1991 have been requested to ensure that the value of military compensation is not eroded by inflation.

The budget request for civilian personnel supports end strength estimates of 1,104 thousand in FY 1990 and 1,100 thousand in FY 1991. A 2 percent pay raise for the civilian workforce is included in FY 1990 and 3 percent in FY 1991.

Readiness

Adjustments

Our adjustments reflect force structure and equipment modernization changes, cancellation and deferral of some programs, fact-of-life changes, improvements in foreign currency exchange rates, and efficiency increases. Some reductions to O&M accounts will have an adverse impact on maintenance and support programs. Most planned improvements in logistical support programs were deferred, further growth in the backlog of real property maintenance will occur, and the level of base operating support services will decrease.

Revised Program

The amended budget requests $90.2 billion for operation and maintenance in FY 1990 and $94.0 billion in FY 1991. After adjusting for inflation, this represents a 1.2 percent increase in both FY 1990 and FY 1991.

The FY 1990/FY 1991 budget provides for Army ground Operating Tempo (OPTEMPO) of 800 tank miles annually and an air OPTEMPO of 15 hours per month. It supports 28 heavy and 5 light battalion rotations to the National Training Center in FY 1990 and FY 1991 and provides for increased Battle Training Program exercises in both years. The Navy protects flying and steaming hours. The Navy Primary Mission Readiness for tactical air operations remains at the FY 1989 level of 87 percent. Similarly, ship steaming days for the deployed and non-deployed fleets remain at 50.5 and 29 days per quarter, respectively. The Air Force supports 19.5 flight hours per month for its tactical air pilots.

Funding of $500 million is provided in FY 1990 and FY 1991 to implement the up-front cost provisions of the base closure plan. These funds are critical to the successful execution of the program and the realization of long-term savings.

Acquisition

Adjustments

At the President's direction, a major Defense Strategy Review is underway. In the interim and in keeping with the longstanding goal to improve the capability and survivability of the ICBM leg of the TRIAD, the President decided to add mobility to a portion of our land based missiles. The decision includes redeployment of 50 Peacekeeper missiles from silos to trains, garrisoned at various Air Force installations. The amended budget also includes $100 million in FY 1990 and $200 million in FY 1991 for the small intercontinental ballistic missile program, primarily for missile certification.

The goal of the Strategic Defense Initiative remains unchanged. We will continue to pursue the general framework of both space- and ground-based defenses while providing the flexibility to adjust the specific deployment schedule as evolving technology is tested and proven. A revised program would continue toward deployment of a system that will meet the requirements of Phase I by focusing on evaluating the potential of the most rapidly advancing technologies such as Brilliant Pebbles. The January budget request for SDI was reduced by $1.0 billion in FY 1990 and $1.3 billion in FY 1991. The revised funding levels are $4.6 billion and $5.4 billion in FY 1990 and FY 1991, respectively.

Major programs that were rescheduled include the Army's UH-60 helicopter, Air Defense Anti-tank System (ADATS) and Army Tactical Missile System (ATACMS), the Air Force TACIT RAINBOW missile, and the Navy's SH-60F Antisubmarine Warfare helicopter and F/A-18 Fighter. Two Coastal Minehunters were deleted in FY 1990 and one LHD-1 Amphibious Assault ship was added in FY 1991. Forty-eight T-45TS aircraft were deferred to provide time to correct deficiencies identified during field testing. B-2 production was rephased in recognition of delays in the test flight program. In rephasing the B-2, differences in estimates of the cost of this program emerged. I have directed a special session of the Defense Acquisition Board to advise me of this issue, and I will inform you of the results.

Among the programs cancelled are the Army Helicopter Improvement Program (AHIP), the Marine Corps V-22 program, and the Navy F-14D production program (although the F-14 remanufacture program was retained). The Navy's Phoenix missile program was terminated after the FY 1990 buy, the final SSN-688 submarine was deleted, the M88A2 Improved Recovery Vehicle was cancelled, and the LANTIRN program was terminated. The Air Force RF-16 reconnaissance aircraft development program also was cancelled in FY 1990. The F-15E and AH-64 Apache programs will be terminated after FY 1991 production is completed.

The budget proposes that NASA assume the funding and management responsibilities for the National Aerospace Plane (NASP). DoD reduced the $300 million funding request for the NASP by $200 million. Legislation will be proposed to allow NASA to obligate up to $100 million of FY 1990 defense funds for the NASP. The President's National Space Council will review the future funding and management of the program.

Revised Program

The amended FY 1990/FY 1991 budget supports a force modernization program committed to increase the survivability and endurance of strategic forces, and to make conventional forces more responsive and flexible by improving their power and mobility.

The amended budget requests $78.8 billion for the procurement appropriations in FY 1990 and $87.1 billion in FY 1991. After adjusting for inflation, this represents a 3.4 percent decrease in FY 1990 and an 8 percent increase in FY 1991. For research and development, the amended request is $39.5 billion in both FY 1990 and FY 1991 reflecting a real increase of 2 percent in FY 1990, followed by a 3 percent decline in FY 1991.

Strategic Forces

Funds are requested to correct ECM deficiencies for the B-1. Production of the state-of-the-art B-2 bomber continues at a reduced pace. Continued development and production of the Advanced Cruise Missile (ACM) will counter projected improvements in enemy air defenses. The budget includes 1 TRIDENT Submarine in both FY 1990 and FY 1991, as well as 63 TRIDENT II missiles in FY 1990 and 52 in FY 1991.

Land Forces

Funding constraints have forced reduction in the size of our land forces in order to preserve the current level of readiness and sustainability. Land force modernization is supported in the FY 1990/FY 1991 amended budget with requests for 603 Abrams (M-1) tanks in FY 1990 and 516 in FY 1991, and 600 Bradley Fighting Vehicles in each year. Air support for our ground forces is maintained with the purchase of 66 AH-64 Apache helicopters in both FY 1990 and FY 1991. Added lift capability is provided to assault-support troops by the purchase of 61 UH-60A Blackhawk and 11 MH-60 Special Operations Force helicopters per year. The air defense capabilities of our ground forces will be enhanced by the purchase of short-range systems, such as Stinger. Long-range systems, such as Patriot, linked together by a network of radar, command and control, and electronic warfare systems are also procured.

Naval Forces

The request in FY 1990 provides for 17 new construction ships and 3 conversions. Principal new construction ships are: 1 Trident SSBN, 1 SSN-688 submarine, 5 DDG-51 AEGIS destroyers, 1 LSD-41 cargo variant, 3 mine countermeasure ships, 1 MHC coastal minehunter, and 5 research and support ships. The major conversion is for the Service Life Extension Program (SLEP) of another FORRESTAL-class aircraft carrier. The FY 1991 request provides for 15 new construction ships: 1 Trident SSBN, 2 SSN-21 Seawolf attack submarines, 5 DDG-51 AEGIS destroyers, 1 LHD amphibious assault ship, 1 LSD cargo variant, 3 MHC coastal minehunters, 1 support ship, and 1 research ship.

Tactical Air Forces

We are emphasizing efficient production rates for our most affordable tactical combat aircraft, the F-16 and F/A-18, to prevent further force structure reductions or undesirable increases in the average age of the force. Production of the more sophisticated, costly aircraft such as the F-14D and F-15E is being curtailed. The Navy plans to purchase 66 F/A-18s for the Navy and 24 AV-8Bs for the Marine Corps in both FY 1990 and FY 1991. Although the F-14D production program has been cancelled, the Navy will initiate the remanufacture of older model F-14A aircraft into the current, more capable, F-14D configuration--6 in FY 1990 and 12 in FY 1991. The Air Force request includes 36 F-15 and 150 F-16 fighter aircraft in both budget years. Introduction of a low cost seeker for the HARM missile, and purchases of IIR Maverick, Phoenix, and AMRAAM missiles will provide these tactical aircraft with the latest and most effective weaponry. Continued development of the Navy and Air Force new generation stealth aircraft (ATA and ATF) and new weapons such as the Advanced Air-to-Air Missile (AAAM) will require consistent commitment through the 1990s to ensure the capability required to defeat Soviet systems. To improve our mid-term close air support effectiveness we have decided to enhance 225 A-10s and 146 existing F-16s, rather than procure a new dedicated aircraft at this time.

Special Operations Forces

Special Operations Forces (SOF) play a key role in protecting our national security by providing flexible, well-equipped forces that can react quickly to crises ranging from terrorist incidents to major conventional conflict. We have made considerable progress in revitalizing the full spectrum of our special operations capabilities, including force sustainability and research and development as well as the modernization of equipment. The amended FY 1990/FY 1991 budget continues support of these goals. In particular, the FY 1990 request includes procurement of 5 AC-130U advanced gunship aircraft and completes the modification of several other Air Force special operations aircraft; it begins development of the Navy's SEAL Tactical Insertion Craft and Advanced SEAL Delivery System programs; and it will activate an additional Army special forces group, initiate programs to modify 51 CH-47D helicopters to the MH-47E configuration and 23 UH-60A helicopters to the MH-60K configuration, and create a theater Army special operations command for each regional unified command.

Mobility Programs

The improvements we are proposing for our mobility forces support our strategy of deterrence and forward defense. Investment in mobility has been largely protected in our deliberations on the amended FY 1990/FY 1991 budget. We are requesting funds for 6 C-17 aircraft in FY 1990 and 10 aircraft in FY 1991. We are also requesting funds to test existing defensive systems for use in our airlift aircraft and to continue the procurement of material-handling equipment for the airlift fleet. Beginning in FY 1989, the Maritime Administration became responsible for funding and managing the sealift ships in the Ready Reserve Force (RRF). We have worked closely with the Maritime Administration in establishing the funding request for this fleet, which is a key component of our sealift capability. To be able to discharge ships in austere ports, we are continuing the procurement of floating and elevated causeways, utility landing craft, cranes, and other container-handling equipment. We are also requesting funds to improve the Joint Deployment System and to provide secure communications for our airlift aircraft.

Research and Development

The amended FY 1990/1991 R&D request will provide for significant effort in basic research and exploratory technology addressing all of the scientific areas that have military relevance. Modernization of our strategic and conventional forces will continue with significant funding for SDI, mobile ICBMs, B-2 bomber and TRIDENT missile and tactical systems such as ATA, ATF, LHX, C-17, anti-armor projects, close air support aircraft, and several integrated command and control and communications programs. Modernization of theater nuclear forces--Follow-On-To-Lance and a tactical air-to-surface missile (TASM)--remain an essential requirement for sustaining NATO's nuclear deterrence. We will place special management attention on the avoidance of duplicative efforts, the use of unmanned vehicles wherever practical and the upgrading of existing systems rather than starting new developments. We will be receptive to cooperative efforts with our NATO allies whenever such joint efforts can satisfy our needs and seek to leverage our IR&D investment to obtain technology advances in areas we cannot afford to fund independently.

Military Construction/Family Housing

Adjustments

Adjustments to the Military Construction and Family Housing Construction accounts followed our personnel, readiness and modernization priorities. Military construction projects in direct support of new weapon systems and force initiatives were retained, although some were restructured. For example, the Air Force restructured the PEACEKEEPER and B-2 Bomber construction programs. Additional reductions consisted primarily of the deferral or deletion of lower-priority projects.

Revised Program

The amended budget requests $4.8 billion for military construction in FY 1990 and $5.6 billion in FY 1991. The adjustments will result in a total FY 1990 military construction program with negative real growth of 18.0 percent. The FY 1991 program recoups some of this loss but, in real terms, is still 6.4 percent less than the FY 1989 level. Excluding foreign currency adjustments, virtually no reductions were made to the operation portions of the Family Housing accounts, which total $3.2 billion for FY 1990 and $3.6 billion for FY 1991.

Defense Share of Federal Spending and GNP

The pressure to reduce federal spending in the wake of continuing high budget deficits has focused inordinate attention on cutting defense spending. Some perceive that defense spending is the principal cause of the federal deficit and should therefore be reduced. Yet there is little evidence to support this contention. During the 1960s, when almost 50 percent of the federal budget was devoted to defense, federal deficits averaged less than 1 percent of the Gross National Product. Yet in the 1970s, when defense declined to only 25 percent of federal spending, the deficit was on the rise. The defense share of total federal outlays will be about 25 percent in both FY 1990 and FY 1991, up slightly from 23 percent in FY 1981. However, this level is significantly below the 28 percent average of the 1970s and the 42 percent average of the 1960s.

There are those who also believe that we cannot afford to devote the requested share of our national resources to defense. Defense spending comprises about 5.3 percent of GNP in FY 1990 and 5.1 percent in FY 1991. This level is far below the 8 percent of GNP invested in defense during the early 1960s and only one-half percent more than the average investment during the 1970s.

MANAGING DEFENSE RESOURCES

The effective management of defense resources depends primarily on achieving long-term stable and predictable funding and efficient acquisition of our weapon systems. For too long, the Department of Defense has been on a fiscal roller coaster, a recipe for waste and inefficiency. For a number of years we have followed the path of developing long-term plans that provide for growth, only to have current budget year requests cut during the congressional budget review, providing for negative growth. Beginning in 1985 and continuing in every year since, the defense budget has been cut to help reduce the federal deficit. These cuts have reduced defense capabilities. Reductions continually disrupt the defense planning and programming process and add significantly to the cost of defense. This pattern could lead to a long-term period of sustained decline in defense capabilities.

A stable defense level, congressional implementation of biennial budgeting, multiyear procurement, and funding of production at economic rates will provide for efficient planning and allocation of resources. Although the first biennial budget was not acted upon in its entirety by the Congress, it has proven invaluable as a tool for effective planning within the Department of Defense. Approval of biennial budgets could provide the resource stability necessary for economical program execution.

The President has directed a Defense Management Review to aid in increasing the Department's efficiency. Effective management, quality performance, and affordability of defense acquisition are among the top priorities of this administration. In partnership with the Congress, we plan to move forward with full implementation of the recommendations of the Packard Commission.

Our goal is to develop a plan for more efficient acquisition practices, such as eliminating unnecessary management layers, streamlining defense regulations and laws, and using more commercial-style competition, off-the-shelf systems and subsystems, and services available in the private sector. Further, we look to the Congress to share in the reform process by streamlining its procedures of oversight and budgeting, and endorsing more efficient practices such as two-year budgeting and multiyear procurement.

We must continue our efforts to simplify our internal processes as well as the complex congressional budget process. Timely and responsive congressional action is essential to stability and predictability in defense funding. It is very encouraging that the Congress was able to pass and send the FY 1989 Defense Authorization and Appropriation Bills to the President before the beginning of the fiscal year. However, the burdensome size and complexity of the congressional oversight structure has resulted in an increasingly time-consuming process. Defense legislation has become laden with restrictions on subjects ranging from contracting procedures to obligation restrictions, as the Congress has sought to manage the funding and execution of our programs in more and more detail.

We need to build a process that employs sound business practices to ensure the stability of individual programs. We should be allowed to set our goals, have programs authorized to meet them, and be provided stable funding over the life of each program. Program stability contributes to reducing total program costs while facilitating long-range planning. It allows for firm development schedules, set specifications, and steady production rates.

Specifically, we must make greater use of Multiyear Procurement (MYP). MYP has yielded significant savings since its inception in 1981, through economical buys and by reducing the uncertainty inherent in single-year funding. MYP programs approved from FY 1982 through FY 1989 will produce savings of $9.0 billion. While fiscal constraints necessitated some adjustments to the MYP program, we are continuing to pursue a significant increase in the use of MYP by recommending 27 programs for MYP in the FY 1990/FY 1991 budget, including the Bradley Fighting Vehicle, DDG-51 AEGIS destroyer, F/A-18 aircraft, DSP satellite, Family of Medium Tactical Vehicles, and the B-2 bomber.

CONCLUSION

As we begin a new administration, we have the opportunity to forge a new consensus between the executive and legislative branches on realistic alternatives for defense programs. We must maintain a steady course, both politically and fiscally, and seize favorable opportunities to improve relations with potential adversaries, but remain ready in any event to secure our national interests. We need to work together to find fresh initiatives, that will help us redirect our scarce defense dollars to the most urgent requirements and productive activities. I believe we can meet this challenge, with creative and cooperative approaches by the Executive branch and the Congress. Such a partnership can substantially strengthen the Nation's security.

Chairman NUNN. Thank you, Mr. Secretary.
Admiral Crowe.

STATEMENT OF ADM. WILLIAM J. CROWE, JR., CHAIRMAN, JOINT CHIEFS OF STAFF

Admiral CROWE. Mr. Chairman, I appreciate the opportunity to reappear and testify on our military posture and the defense budget for fiscal year 1990.

Mr. Chairman, I have submitted a written statement for the record, which, as has been my custom, includes an annual, compressed, unclassified net assessment. With your permission this morning, I will proceed to summarize very briefly the major points of that statement.

Chairman NUNN. Without objection. Your entire statement will be part of the record. Is that your net assessment, the Chief's net assessment, or the Department's? Whose net assessment is it?

Admiral CROWE. No, it is mine. It is, I repeat, unclassified and rather compressed, due to the pressures of time, et cetera. It is not the official net assessment that was requested by Congress.

Chairman NUNN. Thank you.

Admiral CROWE. First of all, the Soviet Union. With respect to events in the Soviet Union and their impact on Russian armed forces, I will go directly to the bottom lines. Clearly, the Soviet military is having a tough time insulating itself from the political, economic, and social problems cutting across the nation as a whole. And, frankly, we are seeing evidence of that more and more every day. That also came out in the conversations that I had with Marshal Akhromeyev last summer.

To facilitate his overall goals, Gorbachev has called for a military policy of "reasonable sufficiency." The world is still curious, of course, as to exactly what that means. But part of it, an extremely important part of it, has been the Kremlin's announcement to pledge a 14 percent decrease in defense spending by the end of 1990 and a 500,000 drawdown in active military personnel. Concurrently, a number of Warsaw Pact countries have proclaimed similar type reductions. However, it is vitally important to understand that these moves, if in fact they come to be, touch only the margins of Soviet military power. Even after reducing 500,000 troops, the U.S.S.R. will end up with an active military establishment of about 4.6 million personnel, and will still possess the world's largest inventory of military hardware. Further, Soviet military spokesmen have candidly admitted that they will retain a very effective offensive potential. Any U.S. strategy must confront these realities.

Now, to my net assessment. I will give a very compressed synopsis of that assessment of the East-West military capabilities. I should repeat again, Mr. Chairman, that these are just the bottom lines.

MARITIME DEFENSE

First, on balance, I believe we would fare well in a maritime contest with the Soviet Union. But such a confrontation will nevertheless require an all-out effort if we are to confine Russian units to their home waters and to establish control over the vital ocean lines of communications. They possess a very, very impressive blue-water navy, and it would be a near thing at best. The quality of our ships and aircraft and the exceptional caliber of our people, however, in my view, provide us the overall edge.

STRATEGIC MOBILITY

In terms of strategic lift, the United States is relatively well-postured for contingencies, short of major war. Given a crisis involving NATO and the Warsaw Pact, however, the Soviet Union would have an initial jump, obviously and naturally, in reaching Western Europe. In contrast, our strategic mobility assets would still be at full strength if we were required to rapidly reinforce NATO. With substantial U.S. force reductions, of course, strategic mobility assets would, curiously enough, become even more crucial to our global posture.

SPACE

In space, which I consider the wave of the military future, both the United States and the U.S.S.R. have fashioned a significant capability. My chief concerns are twofold: Our lift vehicles, which must be enhanced in both capacity and responsiveness, and Soviet anti-satellite weapons, which place some of our most important space systems in jeopardy. We desperately need our own ASAT, both as a counter and deterrent.

STRATEGIC NUCLEAR FORCES

With respect to strategic nuclear forces, the United States and the U.S.S.R. use a different approach, but the end result is rough parity. Our most pressing current problem is to resolve the mobile missile issue and to move into development. Put simply, a healthy strategic deterrent is the foundation of our overall defense posture.

THEATER NUCLEAR

On the theater nuclear level, the follow-on to Lance and a modern, tactical air-to-surface missile are vital, particularly in the wake of the INF Treaty, and to shore up NATO's flexible response strategy and to keep pace with nuclear systems fielded and being fielded today by the Soviets.

CONVENTIONAL FORCES

At the moment, our conventional strength around the world is relatively adequate to deal with a wide spectrum of peacetime crisis and limited contingencies. However, beyond the business of crisis management, the most stressful and worrisome challenge would be a full-fledged conflict with the Soviet Union and, in turn, the collective defense of NATO Europe. After 40 years the alliance is still not able to mount a well-founded conventional defense against a determined Soviet campaign. Yet, if deterrence fails in Europe and the initial defense falters, the coalition will face the unpalatable prospect of losing considerable European territory, or, in the alternative, resorting to theater nuclear weapons. The latter is NATO policy. Such a shortcoming does not necessarily mean that Europe is in immediate jeopardy. Deterrence has a number of elements besides local military posture, especially global economic, political, and military strength. It does mean that, if fiscally constrained, we should look closely at all elements of deterrence and favor those with the highest payoff. Having stressed the NATO area, our most pressing military challenge, let me comment briefly on other regions of special U.S. interest.

EAST ASIA AND PACIFIC

In the region of East Asia and the Pacific, forward defense of the United States is bolstered by our alliance with Japan, the Republic of Korea, and the Philippines. To maintain a favorable balance of power in the region, we must be prepared to protect lines of communication to China, as well as Northeast and Southeast Asia. Today, I judge the posture of United States and allied forces in the Pacific sufficient to deter the Soviets from a major attack in that theater and, if deterrence fails, to secure our fundamental interests. I should note, however, at the same time, that the Soviets are steadily building both their naval and their air forces in Northeast Asia, contrary to any rhetoric that we may be seeing coming forth from Moscow to the contrary.

SOUTHWEST ASIA

In Southwest Asia, U.S. security interests are tied closely to energy, namely access to the region's petroleum. Should the Soviet Union ever decide to co-opt the gulf oil fields, we estimate they could overwhelm the regular forces of Iran, but the Kremlin always has to worry about what happens next. Our war-gaming suggests, for example, that the Central Command can contest a Soviet advance in Iran and probably maintain some access to the Persian Gulf, particularly if we are aided by our friends and allies in the area.

LATIN AND CENTRAL AMERICA

Central America is in a state of flux. The Arias Peace Plan was designed to bring democracy to Nicaragua, but until now, Managua has ignored this injunction. The burden of proof is still with the Sandinistas. They must renounce force if we can expect the area to stabilize. Meanwhile, the United States faces a major dilemma in Panama and a region-wide narcotics problem. Against this background, I much prefer to see an enhanced security assistance program, keyed to promoting regional stability and internal security of the countries of the region.

What I have just given you, of course, is very, very brief and very, very compressed. Overall, the net assessment in my statement may be encouraging to members of this committee, but fiscal reductions could very well impact that assessment negatively, depending upon how the international situation develops. In this regard, you must bear in mind the current military capabilities are a product of the defense buildup of fiscal years 1979 to 1985. We are still reaping benefits from yesterday's investment in people programs, force modernization, unit training and readiness, and sustainability items. Today, of course, we are looking at the prospect of a net decline in U.S. military capabilities. This trend is related directly to a 5-year reversal of the earlier defense buildup.

As Secretary Cheney has testified, meeting demands of the April budget agreement required some agonizing choices. "Everything was put on the table" in the process of framing the DOD budget for fiscal year 1990. Given constraining parameters set up by the top line, his budget submission maintains a reasonable balance between force structure and modernization. It will provide a high return on our investment in current and future capabilities. I would not, however, mislead you.

For several years, the Joint Chiefs of Staff have been testifying that the military risk presented by our posture is, in their judgment, too high. Now, for another year, defense spending will continue downward in real terms; force structure will decrease; and military risks will rise by another increment. They will rise, I guarantee you that. Put bluntly, I would vastly prefer a dollar figure that would permit us to keep our current force structure intact, preferably without sacrificing quality, until we have a clear understanding of where the Soviet Union is going, of the arms reduction calculus, and of the international climate. It seems to me that to make cuts before we know those things, or at least dramatic cuts, is vastly premature.

To sum up, America will enter the 1990s spending little more than 5 percent of its gross national product on defense. This is a very modest investment, perhaps too modest considering the size of our GNP, the position of our free world leadership, the uncertain international conditions we face, the military threat, which, despite the Kremlin's rhetoric, is still there, our global interests, and the forces needed to support a long-standing policy of "peace through strength." Incidentally, a policy which, it appears to me, has worked rather well.

Recent military initiatives by General Secretary Gorbachev are encouraging, yet I find more continuities than changes in the essential elements of Soviet military power. Moreover, we have yet to see a larger commitment of Russian resources to consumer goods and services. Until this happens, the future of perestroika and glasnost remains cloudy.

Over the last 4 years, DOD has absorbed a 12-percent decline in real spending for defense and still managed to maintain a reasonable balance between our global responsibilities. On NATO's central front, however, the military risks are patently higher than the Chiefs and I would prefer.

Today, we are challenged as well to pursue such military objectives as a credible nuclear deterrent, a secure position in space, a healthy maritime environment, and strategically mobile ground and air forces. Concurrently, our military establishment is now deeply involved in the national drug interdiction effort.

In essence, I cannot rationalize a real reduction in spending for defense based upon force drawdowns announced by the Soviet Union, shrinking demands upon our forces, or the prospect that an arms reduction agreement is just around the corner. From a military perspective, I would not have recommended the top line seen in the defense budget now before this committee.

On the other hand, I have seen Secretary Cheney struggle with some very dismal realities, and fashion some equally unpleasant trade-offs while trying to make ends meet within the Department of Defense. He has to deal with a fiscal climate as it is, not with what we would like it to be. Within those limits, I have offered my best advice on how our forces should be structured and worked closely with the Secretary to obtain the most return on our investment. In this light, Mr. Chairman, I support the budget Secretary Cheney has presented to Congress and recommend its approval without major modifications.

That concludes my statement, Mr. Chairman.

[The prepared statement of Admiral Crowe follows:]

STATEMENT OF

ADMIRAL WILLIAM J. CROWE, JR., USN

CHAIRMAN OF THE JOINT CHIEFS OF STAFF

INTRODUCTION

Mr. Chairman and members of the Committee: I appreciate this opportunity to testify on America's military posture in connection with your hearings on the first defense budget of President Bush.

In line with my previous practice and in an effort to assist your deliberations, my full budget statement addresses the military balance as I see it today. Rather than repeat Secretary Cheney's review of the budget details, I will close with a few comments on the more prominent features of the submission and the military implications of a downward trend in defense spending.

MILITARY STRATEGY AND POSTURE

To begin, our national military strategy is designed to safeguard and promote enduring national interests:

o The survival of the United States as a free and independent nation;

o A healthy and growing economy to provide opportunity for individual prosperity and a resource base for our national endeavors; and

o A vigorous alliance relationship to bolster forward defense of the United States and collectively maintain peace with freedom in the world at large.

These interests also describe our success as a nation: a representative government freely elected by the American people; a land bountiful in human and natural resources, a strong and diverse industrial base; a vast market for consumer goods; and the world's largest gross national product. No other country in the world has a better environment for pursuing individual and national endeavors.

NATIONAL SECURITY OBJECTIVES

In early 1988, President Reagan submitted to Congress a report on national security strategy and, within this report, you will find two fundamental objectives:

o Maintain security of our nation and our allies by deterring aggression, repelling or defeating any attack should deterrence fail, and ending the conflict on terms favorable to the United States, its interests, and its allies; and

o Respond to the challenges of a global economy by heeding economic factors that affect our national security, tending to foreign sources of supply in critical areas, and limiting the vulnerability of our supply lines.

These objectives remind us that America has no real choice between economic security and military security.

GLOBAL MILITARY POSTURE

From one day to the next, our global military posture is designed to keep the peace, prevent small crises from becoming big ones, and deter major hostilities. In practice, we strive to maintain a healthy strategic and theater nuclear capability, field forces of high quality to offset numerically superior adversaries, exploit total force planning with our allies, and limit war reserve material to the time required by industrial mobilization.

This posture is not without fiscal constraints and military risks. Today, for example, we are not able to keep all of our forces, active and reserve, ready for combat on an everyday basis. Similarly, we are not positioned to reinforce and defend simultaneously Western Europe, Southwest Asia, and the Pacific Far East. Instead, we must plan to deal with these theaters sequentially depending upon circumstances and priorities at the time.

SOVIET MILITARY POWER

Meanwhile, we are confronted with a rather confusing and incomplete picture of the Soviet Union. In this situation, I am inclined to look at the essential elements and underlying pillars of Soviet military power--just as General Secretary Gorbachev is doing today.

ESSENTIAL ELEMENTS

Basic characteristics of Soviet military power are well-known: robust capabilities in space, the world's only ABM system, strategic forces with intercontinental range, conventional ground and air forces capable of power projection across the entire Eurasian Continent, naval forces poised for the denial of Western sea lanes, and heavily armed surrogates near many of the world's oil fields and maritime choke points. Any U.S. military strategy must confront these realities.

The Soviet Union also towers above all other nations in the production of military equipment. Quantity is not the only worrisome part of this picture. For the last two decades, the USSR has been steadily closing the gap (relative to the West) in military technologies. For example, the Soviet Union is on a qualitative par with the U.S. in such deployed systems as surface-to-air missiles, anti-tank guided missiles, tactical ballistic missiles, short-range naval cruise missiles, communications, and electronic countermeasures. They hold an edge in anti-satellite systems, artillery, chemical weapons and mines.

UNDERLYING PILLARS

On the other hand, the Soviet military establishment is having a tough time insulating itself from political, economic, and social problems cutting across the nation as a whole. The Soviet High Command is genuinely concerned that:

- Many of the nationalities are not emotionally attached to or inspired by the "Socialist Fatherland";

- State science, technology, and industry are lagging behind the West in such important areas as microelectronics, robotics, and sophisticated instruments;

- Factory managers and workers are slow to grasp and practice the fundamentals of quality control; and

- Young recruits are not being prepared adequately for the moral and physical rigors of compulsory military service.

In turn, Gorbachev has moved quickly to gain control of the national security apparatus and to strengthen civilian inputs to the decision-making process. He is looking at all pillars of Soviet military power--not just hardware in the field.

To solve today's problems and invest more in the future, Gorbachev has called for a military posture of "reasonable sufficiency." Related policies can be seen in force reductions he announced last December and associated changes in Soviet military doctrine.

CHANGES AT THE MARGIN

Specifically, the Kremlin has pledged a 14 percent reduction in spending for defense and, by the end of 1990, a 500,000 drawdown in active military personnel. Concurrently, the Soviet Ministry of Defense has advised the Warsaw Pact to stress a non-aggressive stance, no territorial claims on any state, and no more armed forces than are necessary for self-defense.

These promises, however, touch only the margins of Soviet military strength.

- Even after reducing 500,000 troops, the USSR will end up with an active military establishment of about 4.6 million personnel and the world's largest inventory of military hardware.

- Further, Soviet military spokesmen have said that so long as the threat of war exists in the minds of Communist Party leaders, they will maintain an effective offensive posture.

Granted, a larger State investment in consumer goods and services could limit the growth of Soviet military power. Yet, after four years of perestroika, the consumer picture remains as bad as ever--some would say worse.

NET ASSESSMENT

Moving on to my annual net assessment, some preliminary words are in order about the nature of force reductions announced by the Soviet Union and its Warsaw Pact allies.

At the moment, the USSR and its allies are focusing on ground forces. If carried out, these reductions will affect the military balance opposite NATO Europe and China. We must, of course, verify and satisfy ourselves that these reductions actually occur in the timeframe and on the scale promised by the Kremlin.

Much of the global military picture will remain untouched by Soviet reductions announced thus far--for example, strategic nuclear forces, air defense and maritime units, and strategic mobility assets. Moreover, military balances in the Third World will be affected more by Soviet arms transfers than by reductions they plan in the Far East, Southwest Asia, or the regions opposite NATO.

Overall, I am less inclined than usual to predict the future military balance. However, the latest net assessment does provide a relative complete picture of where we and our allies stand today in comparison with the Soviet Union and its allies. While covering this ground, I will mention demands placed upon our combatant forces as well as their preparedness to deal with these demands.

MARITIME DEFENSE

As a member of the North Atlantic Alliance, the United States is pledged to defend the Atlantic and Mediterranean as a whole. This commitment is most challenging in the Norwegian Sea and the Eastern

Mediterranean where the Soviets contemplate a campaign of sea denial. We are confronted with similar problems in the Pacific where Soviet naval power overlaps lines of communication to the Republic of Korea and Japan.

Today, we would fare well in this contest: a product of our nuclear attack submarines, carrier battle groups, maritime patrol aircraft, surface action groups, and replenishment units--plus support provided by our allies in the form of choke point control, mine clearance, land-based tactical aircraft, and especially naval escorts. All of this presumes high readiness and sufficient warning time to reach assigned operating positions before the outbreak of hostilities.

What happens in the Atlantic and Pacific remains very sensitive to our ASW posture. While making substantial investments in nuclear propulsion, quieting, and stand-off weaponry, the Soviets have not cut back sharply on their force of attack submarines--still over 300 in number. To confine this threat to home waters and to establish the needed control over vital sea lines of communication (SLOCs) will require an all-out effort by the bulk of our Atlantic and Pacific Fleets.

On balance, the mobility and capability of our naval forces represent one of our greatest advantages vis-a-vis the Soviet Union and its surrogates. They will be useful in containing the Kremlin to a land campaign and to confronting the Soviets with a wide and unpredictable number of threat axes. Similarly, they buttress our ability to communicate with our allies and to project our own air and ground power in either major or limited hostilities or peacetime crises (e.g., the Persian Gulf). This is a flexibility the Soviets do not enjoy to the same degree.

STRATEGIC MOBILITY

The United States maintains strategic mobility force to underwrite overseas treaty commitments and, at times, to keep small crises from getting out of hand in the Third World. For rapid deployment of troops, we depend largely on airlift. For tactical mobility on the ground (helicopters and vehicles), we rely on a mix of pre-positioned equipment, wide-bodied air transports, and sealift. Most of the follow-on ammunition and fuel will go by sea. Overall, we are well postured for contingencies short of a major war.

Soviet reliance upon strategic mobility forces is driven, in part, by the vast size of the country, marginal road and rail lines linking Russia to the Far East, and reliance upon regular military forces to deal with internal security problems. Both sealift and airlift support a steady stream of Soviet arms transfers to clients in the Third World. As seen in the Afghanistan campaign, Soviet air transports also can be used to project significant military power to adjacent countries.

Given a crisis involving NATO and the Warsaw Pact, the Soviet Union would have an initial advantage in reaching Western Europe due to short distances and a developed road and rail system. The Kremlin also has an advantage in merchant shipping which can be commandeered easily for military purposes. In contrast, we would have a tough time mustering the ships necessary to reinforce Western Europe in accordance with our goals--a consequence of insufficient capacity as well as ownership, flags, and ship crews shifting away from NATO to semi-industrial and non-aligned nations of the world.

Once hostilities commenced, the Soviet merchant fleet would find itself confined to home waters, bottled up in neutral ports, or otherwise out of action. In contrast, their strategic airlift provides a robust wartime capability to swing forces between the European and

Asian theaters all within Soviet airspace. This capability will improve substantially with the new AN-225 air transport which can lift some 500,000 pounds of cargo or twice that of our C-5B.

One other aspect of our mobility deserves comment. If fiscal realities were to require force reductions both at home and overseas, our mobility assets would become even more crucial. We would expect any scaled down forces to be able to deploy quickly and effectively through the globe, but this could only be achieved with adequate modernized lift.

SPACE

Over time, the United States and the Soviet Union have acquired a hefty reliance upon the space environment for communications, and intelligence in peace, crisis, and war.

By most measures--infrastructure, launch boosters and payload, numbers of space vehicles and sensors, and activities and time in space--the Soviet Union has a pronounced lead over the United States. In technical sophistication, miniaturization, and satellite reliability (or the time before normal decay in orbit), the United States still enjoys a comfortable lead. Thus, we do not have to launch as many satellites to keep the same number in orbit during peacetime.

In crisis or conflict, our chief concern is with Soviet antisatellite systems, which place some of our communications and intelligence at risk. This is a main element of the military balance where we find ourselves lacking a deterrent. Yet, the credibility of our strategic deterrent and the effectiveness of our general purpose forces increasingly depend upon a secure position in space.

Overall, America does not need to match the Soviet Union by increasing its space launches four-fold or its time in space three-fold. The U.S., however, does require signficantly improved space launch capabilities. Moreover, we cannot tolerate a Soviet advantage in capabilities to destroy or disable satellites. Thus, I fully support a larger and less constrained investment in antisatellite systems by the U.S. Government.

STRATEGIC NUCLEAR FORCES

With respect to the strategic nuclear balance, neither the U.S. nor the Soviet Union have neglected investments in strategic warning systems, and both have a credible capability to detect an all-out nuclear strike, although our warning system is more sophisticated.

Each side does approach strategic nuclear parity in a different way. For its part, the Soviet Union has more balance in strategic offensive and defensive systems. Their TRIAD of land-based missiles, ballistic missile submarines, and bombers is complemented by substantial investments in leadership survival, strategic air defense, anti-satellite devices, and the world's only ABM system. In the Krasnoyarsk facility, they have indicated a willingness to go beyond limits of the ABM Treaty.

Additionally, Soviet strategic offensive forces are more dispersed and hardened than those of the United States. In the case of ICBMs, they have exploited government control of vast lands within the Soviet Union and placed most of their missiles in very hardened silos or on mobile launchers. When it comes to military targets, our computer-supported analyses always show that Soviet ICBMs give the Kremlin a relative advantage in "damage expectancy." This lead, however, is only one of several factors bearing on the nuclear calculus.

For its part, the United States must maintain general nuclear parity with the Soviet Union by means of strategic modernization programs set in motion over the last decade: more firepower in the TRIDENT class submarine, improved accuracy and hard target kill capability in the submarine-launched D-5 missile and the land-based PEACEKEEPER missile, technologies seen in the B-2, and the long range and high accuracy of air-launched cruise missiles.

These strategic modernization programs are "vital" as the Soviets continue to improve their active and passive defenses and, especially, as we move into a START regime. Put bluntly, a healthy strategic deterrent is the cornerstone of our overall defense posture and compensates to a real extent for some of the shortcomings in our theater nuclear and conventional forces. It serves a similar function for many of our allies.

Further, research on the Strategic Defense Initiative tends to discourage a larger Soviet investment in offensive ballistic missiles and serves notice that we will not allow Moscow to monopolize the field of ABM systems. We are achieving impressive, tangible results with this program as we examine cost-effective ways to move toward a safer defense posture.

THEATER NUCLEAR FORCES

Starting in the mid-1960s, NATO became increasingly dependent upon theater nuclear forces to compensate for conventional shortcomings and provide options short of a strategic nuclear exchange. The USSR responded in kind and eventually outnumbered the U.S. in intermediate and shorter-range missiles. The INF Treaty will eliminate these types.

Major asymmetries continue in short-range nuclear missiles, favoring the USSR. Additionally, NATO's practice of relying upon dual-capable tactical aircraft raises worrisome questions about the survivability and attrition of these assets at the outset of a conventional war. In part, we can hedge this risk by relying more on rear area bases or seaborne platforms (TLAM), but SACEUR urgently needs the Tactical Air-to-Surface missile (TASM) and a modern nuclear battlefield system as seen in the Follow-on to Lance.

In this regard, I believe that NATO and the U.S. have a shared interest in raising the nuclear threshold in Europe.

CONVENTIONAL FORCES

Today, America's conventional strength around the world is relatively adequate to deal with a wide spectrum of peacetime crises and limited contingencies. The most stressful and worrisome challenge, however, would be a full fledged conflict with the Soviet Union and, in turn, the task of defending NATO Europe alongside our allies.

NATO/Warsaw Pact

As a founder and member of the North Atlantic Alliance, America is committed to the forward defense of Western Europe and, if necessary, the restoration of allied territory. Only forces of the Warsaw Pact, led by the Soviet Union, threaten the territorial integrity of NATO Europe.

Over the years, no region in the world has been subjected to more military assessments than the Central Front of Europe. Results are fairly consistent--the deterrent stance of NATO forces has worked for forty years. Deterrence is, of course, a complicated and uncertain calculus with a high political and psychological content. In Europe, I believe it is fundamentally a product of allied political cohesion (who wants to declare war on 16 nations), America's global strength, the Free World's predominant economic position, internal problems in the Soviet Union, and the cutting edge of NATO forces positioned on the Central Front.

If deterrence fails and the initial defense falters, allied forces will face an unsatisfactory outcome: possible loss of considerable territory or, in the alternative, the prospect of resorting to theater nuclear weapons. Thus, we want to make conventional defenses as strong as possible to lessen the need to use nuclear weapons.

Countless studies and programs have addressed measures to enhance the conventional defense of NATO and reduce the prospects of a nuclear spasm. But today NATO is still not able to mount a genuinely effective conventional defense against a determined Soviet campaign. In the final analysis, only adequate conventional forces can offer an assurance against both aggression and the prospect of nuclear war, i.e., large numbers of well-trained forces, weapon systems capable of yielding high exchange ratios, tactical expertise in combining arms, adequate inventories of modern munitions, and sufficient combat logistics support.

At the moment, NATO defense planners are looking at high leverage technologies and a host of other measures to more effectively blunt the initial attack. Obviously, this is the first order of business for an Alliance long preoccupied with deterrence. When it comes to defense, however, NATO's Central Region does not have the number of troops and weapons nor the inventories of preferred and common munitions necessary to prevail in a high intensity conflict of several months or more with the Warsaw Pact.

Of great concern is the possibility that NATO may not make the investments necessary to correct this situation. Perhaps, unilateral Soviet reductions or conventional arms negotiations will redress the balance, but it is much too early to rely on such judgments. In fact, experience would argue that the best way to bring the Kremlin's leaders to the table is to enhance your own strength. The most frustrating aspect of this picture, however, is that the U.S. cannot solve this problem alone. Without allied cooperation and willingness to spend more, a successful conventional defense of Western Europe will be extremely difficult to mount.

Put simply, the most glaring weakness in our global posture is our inability to adequately defend Western Europe conventionally. This shortcoming does not necessarily mean that Europe is in immediate jeopardy or that our deterrent policy will be ineffective. As mentioned earlier, deterrence has a number of elements besides sheer military strength. It does mean that we should look closely at our overall policies and insure that we are realizing the highest return on our investment in terms of deterrence. This is especially important today as we confront the prospect of continuing negative growth in defense appropriations.

Having stressed NATO in order to note our most pressing military challenge, the following comments address other regions of special U.S. interest.

East Asia and Pacific

In the Pacific, forward-defense of the United States (Alaska, Hawaii, and the Marianas) is bolstered by our alliance with Japan. In turn, we are committed by treaty to the territorial integrity of Japan and by another agreement to peace and stability on the Korean Peninsula. To maintain a favorable balance of power in the region, we must protect lines of communication to China as well as Northeast and

Southeast Asia.

Today, I judge the posture of U.S. and allied forces in the Pacific sufficient to deter the Soviets from a major attack in that theater and, if deterrence fails, to secure our fundamental interests.

North Korea still enjoys a marked advantage over the South in ground formations. The ROK, however, is well postured defensively and buttressed by the 2nd U.S. Division. More critical would be U.S. air in the Far East which is positioned to render immediate assistance. It is very unlikely that Pyongyang would provoke this combination without support from the PRC or Soviet Union.

Two words of caution are in order. First, the Soviet Union has been increasing the reach and firepower of its air and naval forces in the Pacific and supporting a general upgrade of tactical air forces by North Korea and Vietnam. Second, we are confronted with political pressures on bases in the Philippines. In short, we must sustain our air and naval strength in the Western Pacific and, at the same time, remain flexible on base options. This is not an easy situation to manage.

Southwest Asia

In Southwest Asia, U.S. security interests are tied closely to energy objectives--namely, access to oil at reasonable prices. The Persian Gulf has more reserves than any other region in the world, and no producer can lift petroleum out of the ground at less cost than Saudi Arabia and Kuwait.

Should the Soviet Union ever decide to co-opt the Gulf oil fields, their divisions and tactical air forces could overwhelm the regular troops of Iran, but they always have to worry about what happens next. Our gaming suggests, for example, that the Central Command (CENTCOM) can contest a Soviet military foothold in Iran and probably maintain some access to the Persian Gulf. When stiff resistance by the Iranians, multilateral responses by the West, and support by the Gulf Cooperation Council are added to the picture, the Soviets would be confronted with even more serious problems than they encountered in Afghanistan.

Again, the Kremlin cannot overlook the fundamental global strength of the United States. Even if successful in Iran or the Gulf, their progress would be limited to the water's edge and America's ability to project power would severely hamper Soviet use of captured oil facilities.

Latin and Central America

Turning to Central America, the situation is in a state of change. The five Central American countries recently have concluded an accord designed to bring democracy to Nicaragua and disband the Nicaraguan Resistance or "Contras." We are assessing the impact on the region and on our overall objectives. Up to now, Nicaragua has worked against peace with freedom in the region, virtually ignoring terms of the Arias Peace Plan. The burden of proof is still with the Sandanistas. Above all, they must respect human rights within their own country and stop interfering with their democratic neighbors.

Meanwhile, the United States is faced with major dilemmas in Panama and sagging confidence in the leadership of Panamanian Defense Forces. A resolution will be painful and probably protracted as Panama sorts out its political and economic problems.

Concurrently, we are confronted with the illicit trafficking and production of narcotics in Latin America, posing a threat not only to the sovereignty, integrity, and stability of governments to our South, but also to the social fabric of the United States itself.

Against this background, I much prefer to see a long-term agenda for the region and an enhanced security assistance program keyed to the everyday threat of low intensity conflict. Over the next several years, however, America will have to rely primarily on its own forces to protect U.S. lives and property, improve air and sea surveillance of the Caribbean, fend off coercive moves by Cuba and Nicaragua, bolster U.S. commitments under the Rio Treaty, promote regional stability generally, and support the drug interdiction program. We are competent to do this, but it will take persistence, time, and some reordering of our priorities.

INTERNATIONAL TERRORISM

Cutting across the international scene is a persistent threat of state-supported terrorism as seen in assassinations, kidnappings, hijackings, and bombings. While the Kremlin professes to have no interest in this form of coercion, some of its allies and surrogates remain deeply involved in the training, covert passage, and arming of terrorist groups.

In response to this threat, an ounce of prevention by civil authorities is worth much more than a pound of military cure. But it's very tough to provide a point defense of every public meeting place or conveyance. Thus, when and where it is possible to do so, we depend heavily upon our Special Operations Forces. In this regard, I can vouch for their professional expertise, but I cannot promise success in every instance. Some acts of terrorism are so disastrous and conclusive that there is not much anyone can do to help after the fact.

Given these realities, I believe we must make terrorism more costly for the nations who support it. Our Special Operations Forces have a role in this process. In practice, we also depend upon our conventional military forces to send a strong message to states known to have a role in specific acts of terrorism, Libya being a noteworthy example. Sometimes the international community has accused us of being heavy-handed, but this must be weighed against no deterrent whatsoever to this form of aggression--normally conducted against innocent civilians.

THE DEFENSE TRANSITION

Overall, the foregoing net assessment may be encouraging to members of this Committee. You must bear in mind, however, that current military capabilities are a product of the defense buildup of FY1979-1985. We are still reaping benefits from yesterday's investment in people programs, force modernization, unit training and readiness, and sustainability items. What we are doing now with defense appropriations will impact the net assessment for the early and mid-1990's.

Today, of course, we are looking at the prospect of a net decline in U.S. military capabilities. This trend is related directly to the federal budget deficits and a reversal of the earlier defense buildup.

From FY1985 through FY1989, real spending for defense (adjusted for inflation) declined by 11 percent. In turn, about $300 billion was cut from the Defense Plan contemplated in January 1987.

When preparing for FY1990, initial guidance to the Military Departments postulated that real expenditures for defense would grow at an annual rate of two percent. Shortly after assuming office, President Bush revised the fiscal guidance to provide for no real growth in FY1990 followed by 1 percent in FY1991-1992 and 2 percent in the FY1993 timeframe. In turn, the Pentagon cut $60 billion from the Five-Year Defense Plan carried over from the Reagan Administration.

In mid-April of this year, the fiscal guidance was revised as a result of the Budget Agreement between Congress and the President. The

FY1990 program now reflects a real decline of about 1 percent in spending authority for defense relative to the current fiscal year.

At the moment, work continues on the defense strategy review ordered by President Bush and the realignment of Service programs. Everyone must understand, however, the Department of Defense will have grave difficulty developing a more forward looking, fully integrated strategy without a durable consensus on the fiscal guidance--a consensus which ideally would include the Congress.

TODAY'S DEFENSE BUDGET

As Secretary Cheney has testified, meeting demands of the Budget Agreement required some agonizing choices. As he said at the time, "everything was put on the table" in the process of formulating today's budget.

The priorities the Secretary applied and the details of the final decisions are covered by his statement. I will comment only on some of the salient capabilities which have been impacted by the whittling process.

FORCE QUALITY

This budget is very tight when it comes to protecting a force of high quality. You will find military compensation falling short of inflation rates (not to mention comparability with the civilian sector), declining investments in equipment modernization, smaller inventories of spare parts, more deferral of depot maintenance, and a growing shortfall of base facility maintenance. Further, we placed a heavy burden on our people in the last minute process of reducing defense outlays.

STRATEGIC MODERNIZATION

As Secretary Cheney has noted, the goal of the Strategic Defense Initiative remains unchanged. The current budget supports a robust research and development program for SDI. Decisions relative to SDI deployment do not have to be made at this point in time. DOD will continue to evaluate the most promising technologies and deployment feasibility as these technologies are proven.

Procurement of the TRIDENT submarine continues at a rate of one per year. Deployment of the B-2 bomber will be delayed while we test and evaluate its new technologies. With respect to the modernization of our land-based ICBMs, the budget proposes to move forward with the Rail-Mobile PEACEKEEPER. In the event of a deepening East-West crisis, this system will be a great deal more survivable than our silo-based ICBMs. Concurrently, R&D investments in the Small ICBM will continue.

CONVENTIONAL FORCE

Major changes were required in conventional force structure and programs.

The Army will retain 18 active and 10 reserve divisions. However, one brigade will be cut from divisional force structure in the process of reducing active end strength by 7900 personnel.

As previously planned, the Army will reduce its fleet of helicopters by some 2000 airframes over the next several years. To move forward with the new light attack helicopter (LHX), the Army will be revamping its heavy attack program. Investments in the Helicopter Improvement Program (AHIP) involving the OH-58 will be terminated. The "buy out" of APACHE helicopters will be accelerated at slightly reduced goals. Concurrently, reserve force structure will be drawn down by several attack helicopter battalions.

The Air Force will continue development and acquisition of an Advanced Cruise Missile (ACM) for the B-52H fleet, an Advanced Medium Range Air-to-Air Missile (AMRAAM), and the Joint Surveillance Target Attack Radar System (JSTARS). These systems are instrumental to the future robustness of the Air Force.

The Air Force will enter the 1990's with 35 tactical fighter wings. The pace of developing an Advanced Tactical Fighter (ATF) and fielding an Advanced Tactical Aircraft (ATA) will be slower than previously planned. Further, procurement of the F-15E deep strike aircraft will wind down short of the originally planned goal.

The Navy will retire CORAL SEA and maintain no more than 14 carrier battle groups. Only 13 of the carrier air wings will be manned by the active force. Though short of Fleet AAW escorts, the Navy will accelerate retirements of older DDG-2 and DDG-37 guided missile destroyers.

Active ASW forces will be reduced as well. Over the next several years, the Navy plans to transfer 24 frigates (FF-1052 class) to the reserves. The Navy also will be retiring all P-3A and some P-3B aircraft from its reserve force--all without replacement until the Long Range Air ASW Capability Aircraft (LRAACA) is phased into the active force.

While amphibious force modernization is supported in this budget, the Navy will not be able to lift the assault echelon of one Marine Expeditionary Force plus a Brigade until the late 1990s. Additionally, the Marine Corps will be terminating the V-22 program and procuring instead a mix of CH-53s and CH-60s for the vertical assault mission.

BUDGET SUMMARY

Given constraining parameters set by the top line, the budget submission maintains a reasonable balance between force structure and modernization. It will provide a high return on our investment not only in current capabilities but also in preparations for the future, but it also confirms the principle that we cannot get more defense for less money.

At the outset, this budget was shaped to balance cuts in personnel, operations, and maintenance accounts with a commensurate reduction in force structure. The mid-April decrement of $3.7 billion, of course, complicated the problem further with accompanying impacts on capability and risk.

For several years, the Joint Chiefs of Staff have been testifying that the military risk is in their judgment too high. Yet, for another year, defense spending will continue downward in real terms; force structure will decrease; and military risks will rise by even another increment.

Put bluntly, as the senior adviser to National Command Authority, I would vastly prefer a dollar figure that would permit us to keep our current force structure (without sacrificing quality) until we have a clearer understanding of where the Soviet Union is going, of the arms reduction calculus, and of the international climate. In my judgment, there are too many uncertainties on the horizon at this time to justify force cuts.

CONCLUSIONS

In perspective:

America will enter the 1990s spending little more than five percent of its gross national product on defense. This is a very modest investment--perhaps too modest--considering the size of our GNP, international conditions, the military threat, our global interests, and the forces needed to support a longstanding policy of "peace through strength."

Recent military initiatives by General Secretary Gorbachev are encouraging. Yet, I find more continuities than changes in the essential elements of Soviet military power. Moreover, we have yet to see a larger commitment of Russian resources to consumer goods and services. Until this happens, the future of perestroika and glasnost remains cloudy.

Over the last four years, the Department of Defense has absorbed an 11 percent decline in real spending for defense and still managed to maintain a reasonable balance between our global responsibilities. On NATO's Central Front, however, the military risks are higher than I and the Chiefs would prefer.

Today, we are challenged as well to pursue such military objectives as a credible nuclear deterrent, a secure position in space, a healthy maritime environment, and strategically mobile ground and air forces. Concurrently, our military establishment is more operationally involved in the national drug interdiction effort.

In essence, I cannot rationalize a real reduction in spending for defense based upon force drawdowns announced by the Soviet Union, shrinking demands upon our forces, or the prospect that an arms reduction agreement is just around the corner. From a military perspective, I would not have recommended the top line seen in the defense budget now before this Committee.

On the other hand, I have seen Secretary Cheney struggle with some very dismal realities--both political and economic--and face up to some equally unpleasant trade-offs while trying to make ends meet within the Department of Defense. He has had to deal with the fiscal climate as it is--not what he would like it to be. In that context, I have offered my best advice as to how our forces should be structured within those limits and worked closely with him to obtain the most return on our investment. In my judgment, he has done his work thoughtfully and wisely with due regard to the present and the future.

In this light, I support the budget Secretary Cheney has presented to Congress and recommend its approval without major modifications. Above all, I urge you to avoid changes that would upset the carefully crafted "balance" of the submitted programs.

Chairman **Nunn**. Thank you very much, Admiral Crowe.

Mr. Secretary, let me defer to Senator Warner; he has a very important meeting and I am going to defer to him to ask questions first.

Senator **Warner**. Thank you, Mr. Chairman.

I and other members of the group on the Republican side have a meeting with the President but we will be back. I wanted to lead off with one question and that regards the Soviet Union, Mr. Secretary.

SOVIET UNION

We have watched with great interest your statements and those of the President. I would like to tell you about a personal experience I had in the past week as I went back to visit throughout Virginia. I was addressing a group of high school students and one said to me, Senator, you are asking the Nation for $300 billion primarily as a deterrent—this individual used other words—against a threat, now and for the foreseeable future, with the Soviet Union, a nation that cannot even produce enough sugar to provide for its coffee and cake. A nation which cannot produce its basic fundamentals of household equipment, a nation which has come to the rescue of the United States to clean up its oil, and a nation that is going to receive the Queen as a guest. Now, why, Senator, do you need that amount of money? And you have recited here today the answers which I and others will take back to our constituents. But against this already confusing background are the statements of yourself and the President. My question to you, Mr. Secretary, is first, are you and the President operating off the same set of facts to draw your conclusions? And wherein do you differ, in terms of your judgment, based on, presumably, the same base of fact?

Secretary **Cheney**. Well, Senator Warner, the President and I were in a meeting yesterday, and, frankly, chuckled at what has developed by way of press commentary on the views that we have expressed. We do not perceive a significant difference, in terms of our views of the situation with respect to the Soviet Union. I had responded previously, perhaps with more candor than was warranted, about my somewhat pessimistic view concerning Mr. Gorbachev's prospects for achieving his reforms inside the Soviet Union. The President has expressed the hope that those reforms will be successful. We do not see those as conflicting or contradictory statements.

I think the important thing is, and the point that I have tried to make, and that I will continue to try to make, is that there is enormous uncertainty surrounding the question of whether or not the Soviet Union now constitutes less of a threat, whether or not the cold war is over, whether or not peace is at hand, and whether or not we are going to see a permanent adjustment in Soviet policy, the kinder, gentler approach to foreign policy than we have experienced in the past.

We have 70-some years of experience with the Soviet Union. With the brief experience of World War II when we joined together against the common enemy, that relationship has been one of varying degrees of hostility and threat. The Soviet Union is the only nation in the world that can threaten our very existence. It retains an enormous military capability that both the Admiral and I addressed ourselves to.

I do not believe that as Secretary of Defense I can recommend to the Nation that we ought to make fundamental adjustments in our policy or reallocate our resources away from the military sector based upon what the fates might or might not have in store for Mr. Gorbachev and his reforms inside the Soviet Union. When we see the kind of fundamental, long-lasting, irreversible change that I think most Americans hope to see, based upon what we perceive to be his intentions, then I will be happy to come before the committee and recommend that we reorient our strategy, modify our resource allocations in the defense area, et cetera. I have not yet seen such change. On that basis, I am very hesitant to go along with the notion that many people seem now to want to embrace, that there is no need for any further vigilance on our part.

Senator WARNER. Mr. Secretary, my own views coincide with the ones that you have expressed here today. I want to congratulate you on doing a good job thus far. You came into a very difficult situation.

But returning to my question, I presume that you and the President are operating from the same base of fact, body of fact, that you did not possess and facts that he might not have seen in his own briefings or study?

Secretary CHENEY. You are correct, Senator.

Senator WARNER. I think it is a healthy thing to have some differences now and then, and I commend you and the President as you might address these issues in public, to look at them somewhat differently. But I judge also the second answer that you have given me, there is no fundamental difference of opinion or approach between you and the President with respect to the direction which we should address our defense needs?

Secretary CHENEY. That is correct. This is his budget that I am presenting today.

Senator WARNER. I thank the Secretary.

Chairman NUNN. Thank you, Senator Warner.

Senator Cohen, do you have to depart? If you do, I will defer to you.

Senator COHEN. Thank you, no.

NATIONAL SECURITY STRATEGY

Chairman NUNN. Mr. Secretary, we have focused a lot on strategy and the broader aspects of that, national security strategy, beyond simply defense, over the last couple of years in this committee. We are delighted that the Bush administration is undertaking a fundamental strategy review now, and we will be following that very closely.

Admiral Crowe mentioned, I believe, that we measure overall security, not just militarily, but also economically, and politically. Looking at it in that vein, it seems to me NATO, economically, politically, and overall, is dealing from strength today, mainly because of the tremendous economic strength we have in the free world. The Soviet Union is dealing from weakness, with the military equation being the exception, because they certainly have strong advantages there. But I am concerned that NATO appears to be shooting itself in the foot in the post-INF period. And those shots are being repeated every day. It is not as if people did not understand and predict that when you reduce the missiles that had ranges that could go beyond Germany, that there was going to be more focus in Germany on the missiles that could not get beyond, in many cases, West Germany, let alone East Germany. So this is not a surprise.

And yet NATO, as a whole, does not seem to be prepared for it with any kind of vision, with any kind of strategy. It seems to me, and I am not faulting the United States on this, but it seems to me the alliance has some major political and military challenges that simply are not being faced. What we are doing is conducting what should be serious reviews on the public pages of the press all over the world. I do not mind a good debate, but I think that the NATO debate should now be focusing on what we want Europe to look like in 10 years, and what we would want the Soviets to do if we asked them and they said, okay, we will do anything you want to do. What do we want them to do in central Europe? I do not know that we have even thought through that problem. Of course, we would like for them to get out completely, but if that required the United States to get out completely too, have we thought through that?

I believe that if we do not do something in the next 2 or 3 weeks at this upcoming very important NATO summit that should be dealing with these broad questions and the tremendous opportunity for reductions in conventional forces that the Gorbachev unilateral announcements have given us the possibility of, plus arms control, we are going to be dealing with the very narrow question of nuclear modernization. I do not diminish the importance of nuclear modernization, but it seems to me the focus in the debate is really lacking vision and foresight as to where we ought to go.

My question, Admiral Crowe, is this: If, for instance, the Soviets were to come in tomorrow morning and say, look, we have approximately 1,400 short-range nuclear ballistic missiles in Europe and you have 88. Yours are not modern and ours are. We will reduce down to 50 if you will reduce down to 50. Would we say, sorry, we do not want you to reduce yours by 1,350 while we reduce our old systems by 28? If we say that, it is a position that is very hard to explain to the public. It seems to me that we have to do some real thinking about what we want and where we are going, and I do not see that happening. If the Soviets made that offer tomorrow, we will reduce 1,350, we will go down to 50 of our systems, many of which are modern, if you will take your old systems, which you admit are being phased out, and reduce down to 50, what would be your answer, a military point of view, your personal opinion?

Admiral CROWE. I would be the first to admit that there is a great deal of appeal into the ratio that you have painted. I would like very much to see the asymmetry, which we confront on the NATO front in SNF missiles, et cetera. However, I think, as you said in your own statement, what you have to say is—I only talk about the immediate bargain. For example, my wife buys a dress and comes home and says she could not afford not to buy it; the price was so good. And this is much that same kind of thing. You have to say, what do I have when that is over? You have then a conventional situation where you are facing rather imposing and a great deal superior conventional forces, you have brought back the one fear and dread that all of Western Europe has tried to put behind them now for 40 years, and they have relied on nuclear weapons to keep it behind them. It became pretty clear several years ago when the Soviet Union reached parity with us in strategic nuclear weapons that the threat of a strategic nuclear exchange alone was not credible to stop a conventional war on the western front or on the FEBA in NATO.

MODERNIZATION

Chairman NUNN. What is our plan, then, for modernization? How many are we going to have when we get through modernizing, if NATO approves, if Germany approves the deployment with the modern Lance? We have 88 now, what is our plan?

Admiral CROWE. We have a plan for what we want, but everything you do in NATO is the result of compromise and dialogue, and that is now being hammered out, Mr. Chairman. I do not think we know the outcome of that debate or those discussions as to exactly the level we will seek yet. However, the big problem which all of NATO, at least the leadership, worries about is whether or not you can stop at 50, or you go clear to a third zero. Once you engage in this dialogue, where is it going to end? And incidentally, it is a bilateral proposition. We do not control——

Chairman NUNN. So NATO does not have any faith in its own ability to say we will not go below a certain level? We basically are saying we are afraid that we do not have——

Admiral CROWE. Do you, Mr. Chairman?

Chairman NUNN. I have less faith—I see the problem, but I have less faith if we stay with our current position of saying we are going to do something which is unacceptable to a massive number of Germans. I think it is very hard for NATO to have a policy to defend a country in a manner that it refuses to accept itself.

On the other side of that, the Germans need to understand it is almost impossible to get the United States to have a long-term situation in Germany if we are not comfortable with the arrangements. So it cuts both ways. I am not suggesting here necessarily a solution, but I do think that we have got to have some strategy. And I do not see any strategy at all coming out of this. I do not see any strategy on the part of the German Government, where they are saying they will not modernize, but they want to negotiate. I do not see much strategy coming out of the other side of the position which says we insist on modernizing and building a weapon that you will not accept, but we will not negotiate even if the Soviets make tremendous unequal positions.

I see both sides of this argument as having no vision. That is the way I see it, very frankly. I am surprised that after 2 years—and, Mr. Secretary, you have been over there 6 weeks, I am not laying this at you—I am surprised that these things, which were so predictable after INF, have not been dealt with better in the alliance and that we are having to focus on what I consider to be a very narrow part of the problem, when the real opportunity is to correct this huge conventional disparity in favor of the Warsaw Pact and the Soviet Union that has existed for a long time.

What would be wrong with the proposition, Admiral Crowe, of saying to Germany, okay, you are reluctant to modernize, we are reluctant to negotiate. If you agree to modernize, we will agree to negotiate with a limit, not going to zero, but we will make the negotiation dependent on the conventional arms control outcomes and make them parallel, and certainly not to proceed. What is wrong with that kind of policy?

Admiral CROWE. I think the Secretary of Defense has something he would like to say.

Chairman NUNN. All right. I will let the Secretary respond. I also want to ask you that question from a military point of view.

Secretary CHENEY. This is a very difficult and delicate area. I spent a few days at a nuclear planning group meeting in NATO a few weeks ago. A couple of points I think need to be made here. With respect to your first question: What would be our response if they came in and said, well, we will go to equal levels? I would love to have the Soviets come down to equal levels. I think it is important for everyone to recognize that the Soviets have a far larger number of more modern, short-range nuclear forces in Europe than we do. I do not think that even ought to be negotiable. I would hope they just automatically reduce down to that level. But I would remind everybody that short-range nuclear forces are different from strategic forces. The relevant purpose, if you will, with respect to the short-range forces in Europe, is not to counter Soviet short-range forces. U.S. nuclear forces, tactical forces, are in Europe to counter Soviet conventional capability.

Chairman NUNN. Exactly. Why cannot we then tie in negotiations to conventional arms control?

Secretary CHENEY. I am going to come back to that in a minute. The ratio of their forces to our forces is not nearly as important as is the ratio of the conventional forces.

Chairman NUNN. I agree.

CONVENTIONAL FORCE REDUCTIONS

Secretary CHENEY. We have a package on the table now that was developed within the alliance at Vienna in terms of conventional force reductions. It is a good package. It zeroes in on those areas that we think are most significant, in terms of tanks, artillery, and armored personnel carriers. That was worked out within the alliance and ought to be aggressively pursued within the alliance. When you are working within the alliance, you have to be careful not to make unilateral moves that are going to create uncertainties there.

Let us talk for a minute about the negotiations on the proposition of U.S.-Soviet short-range forces. There is a strategy in place. It is a strategy we inherited. It was a strategy that said, originally, there would be a decision in the spring of 1989 on short-range nuclear force modernization. That is what the Germans wanted, I think, because they hoped to resolve that matter before they got down to their elections in late 1990.

The comprehensive concept has been negotiated extensively within the alliance. It was expected that we would be able to make a decision, by the time we got to the NATO summit at the end of May, on the question of modernization. That is not going to be possible, given developments domestically and changes in the position of some of the alliance partners. What we have now done, in effect, is to agree to delay the specific commitments with respect to deployment. That is a fairly generous proposition from our standpoint, I think. We have said that we are prepared to move forward on our own with respect to R&D in terms of the follow-on-to-Lance and TASM, but that we do not need, at this time, a specific deployment decision with respect to location, et cetera, from our allies. The proposition that has been put before us by the Federal Republic of Germany strikes me as a weak one, because it focuses solely on negotiations.

Chairman NUNN. I agree with that.

Secretary CHENEY. We have been worried about a two-track approach. We have been nervous about going back to the precedence of the INF agreement, where we decided to negotiate and deploy simultaneously out of the fear that was alliance-wide that we would end up with a third zero. Once you start negotiations on short-range nuclear forces, if you cannot resist the political pressure to get into the negotiations, how do you resist the political pressure that is clearly going to be there to accept the first Soviet offer, which is going to be not 50, but probably zero?

The proposition we are faced with now is a single-track: Do not deploy; negotiate. That is what the Germans have, in effect, presented to us. We have made it clear we find that unacceptable. The British, obviously, find it unacceptable as well.

Chairman NUNN. Mr. Secretary, let me just say this——

Secretary CHENEY. Now, is this going to create a problem for us? I do not know. I would hope that we can get it resolved, but if we do not get it resolved by May, it will not be the first time we have had these debates within the alliance. I would completely agree with you, Mr. Chairman, that the May summit ought to focus on a whole broad range of issues, in terms of our strategy toward Europe, not just on the question of short-range forces.

Chairman NUNN. Oh, I am not suggesting a one-track policy. I reject the Germans' approach to not modernize and to negotiate. I think that is a non starter. I do not suggest a two-track policy, where we say we will negotiate and modernize on, simply, nuclear weapons. I think your point about conventional being part of it is absolutely correct. I suggest a three-track policy. The Germans agree to modernize, we agree to negotiate without going to zero, and we make it clear there will be no agreement with the Soviets on this whole subject until such time as we know the outcome of conventional arms control or at least it is in view, so we know where they are going and we can also watch the Gorbachev unilateral reductions to see if the declaratory policy ends up being implemented. I would like any reaction to that.

Admiral CROWE. Mr. Chairman, I would have no problem whatsoever with what you just described. However, the political environment, which you earlier referred to in Europe, I think the third point would be very difficult to sell.

We have the same problem in NATO in developing strategy that we have in the United States and in any democracy in peace time, and that is, that really effective strategy has to be consensual. In a pluralistic organization it is hard to develop consensus on strategy.

Chairman NUNN. I understand that. But it seems to me the fundamental mistake has been made here that we agree with the Germans on not pushing them on modernization without getting from them, obviously, any kind of agreement about what we were going to do on negotiation and the relationship between the nuclear and the conventional. It seems to me we have agreed with about half of their one-track approach, and now they are going for the other half, and we did not ever get an agreement on the other half. I just do not see what our strategy is. I disagree with the German position, but I do not see that we have framed an adequate response at all.

My time has expired. Senator Cohen.

Senator COHEN. Thank you, Mr. Chairman.

I look around here and I find myself in a foxhole. Everybody has retreated to the White House. I do not know why they all went at this particular time, but I have to rationalize and assume that the White House felt that everyone else on the committee on this side was dispensable, but it was important that I stay. [Laughter.]

And protect their interest.

GORBACHEV'S POTENTIAL SUCCESS

Mr. Secretary, I know that some have responded to your comments concerning Mr. Gorbachev's potential success, and have speculated that you have come under the dark and oppressive wing of the Pentagon. You and I have attended a number of conferences sponsored by the Aspen Institute—and that is not Les Aspin—and the Carnegie Corporation. I think we have listened to some of the foremost scholars in this country, who wear no political stripe of any kind and have no identifiable interest one way or the other. I think that most of the scholars share a somewhat guarded, if not pessimistic, view in terms of the potential success of perestroika, as it is trying to be reconciled with glasnost.

But let me come to the issue that Senator Nunn has raised. It seems that the West Germans are unwilling to upgrade the Lance because they fear that, if there is a war, nuclear bombs would be dropping on German soil alone. We are seeing more and more of this reported in the press. And, of course, that ignores the presence of some 300,000 men and women from this country, who are there to reassure the Germans that if a war should start, it would not be fought only on German soil, and not only by the German soldiers.

The solution that has been offered by Mr. Genscher, and he is sort of a Pied Piper for Chancellor Kohl, leading him down this path toward negotiations on the short-range weapons, his position has been heralded by some as sort of the sound of wise and visionary statesmanship. But others, just as well, can view that sound as being the echo of an umbrella tapping on the cobblestones of Munich. I think that experience has to mean something, more than just the name we give to our mistakes. Experience ought to be also identified with the name we give to our successes.

I recall just a few years ago, the German people, and the Europeans in general, were quite courageous in resisting the popular appeal of a nuclear freeze. As a result of resisting that popular pressure, they now have eliminated a whole generation of nuclear weapons.

I think if the West German people are going to insist upon negotiating short-range nuclear weapons before we have either a reduction in the tremendous capability on the Soviet side on a conventional level or a reduction on the nuclear side, I think we are going to have far greater difficulty in achieving the common goal that was announced back in 1987 at the NATO foreign minister's meeting. I think it is going to put our people at greater risk.

I do not think that I am going to be in a position in the future to be able to argue to my constituents, or, indeed, to others that I speak with, that I should tax the American people to put American men and women in a position of greater danger than the German people are forcing us to do. I am going to have to reconsider some of the commitments I have made.

I know that in the past Senator Nunn has offered proposals about some phased reduction in our conventional forces in Europe. I have resisted those to date. But I think that if the West German people have come to the conclusion that they can place more faith and reliance upon Mr. Gorbachev's words and assurances than they can upon a sound NATO strategy, then it would be very difficult for me to continue to commit the size of the forces that we have in Europe under those circumstances.

So I understand your statement that we should not take unilateral actions that go beyond the framework of the NATO alliance, but the fact remains that the West German Government has already taken a unilateral position, going beyond the framework, as I understood it, that was achieved or reached back in 1987.

I would just say that I agree with Senator Nunn, we ought to have a clear-cut proposal, in terms of what we want, whether it is a two-track or a three-track as he has proposed. Maybe it ought to be a double-digit proposal, calling for the Soviets to reduce—I think they have some 1,600 tactical nuclear missiles, compared to our 88—to ask them to reduce it under 100, and let us start at a double-digit level on both sides. And then we will start negotiating. That may be one option. But I do not think that we can sit back in silence and let the dynamic unfold with people now rushing to embrace the so-called Genscher lead in negotiating on short-range nuclear missiles before we have achieved a conventional balance.

Secretary Cheney, you do not have to respond to this, it is just a personal opinion that I am having difficulty rationalizing that kind of firm commitment, while we have one major country breaking away from that framework.

RAIL-GARRISON

On rail-garrison, you have made a proposal to strike a balance, a compromise. And the difficulty, of course, with rail-garrison has always been strategic warning. The difficulty I have with rail-garrison is that there is a need for strategic warning, that strategic warning signals might be missed. They might be misinterpreted or, indeed, they might even be ignored. Our history, I think, has been fairly replete with examples: where the Germans invaded the Soviet Union, there was strategic warning there; the attack on Pearl Harbor, another strategic warning; the Israelis had strategic warning back in 1973 when the Egyptians went to war. So I have some difficulties with the concept, at least, of the need for strategic warning for a rail-garrison proposal.

My understanding is that the Defense Science Board has talked about, I am not sure they have done anything about it or recommended anything, but the Defense Science Board has at least talked about the possibility of taking a portion of the MX and rail-garrison and deploying them on a continuous basis. That strikes me as creating more problems. There would not be enough deployed that would be meaningful in the way of survivable MXs, and what is deployed would probably have such a high profile you would have all the problems of public interface that the rail-garrison was designed to avoid.

Another problem I have with it is, apparently, at the Moscow summit there were a number of principles agreed upon. Number one, to restrict mobiles to small geographical areas. That would be one of the ways in which, if we could not eliminate all mobiles, that we would agree to some kind of restriction into specified or designated areas. Of course, the smaller the area, the less flexibility those mobiles might have. It enhances verification, but also makes a much easier target to hit. Number two, there would be prior notification of any testing or deployment for training purposes of those rail systems, or mobile systems. This, it seems to be, would preclude the Defense Science Board's proposal at the outset, that you could have a continuous deployment of rail MXs.

My time has expired, but could I have one more minute, Mr. Chairman?

Chairman NUNN. Senator Cohen, go ahead and take what you need. You are representing the whole Republican side. [Laughter.]

Senator COHEN. I am sure they will be happy to hear that.

But our proposal is to ban all mobile systems. That is unlikely to be achieved, but I would like your reaction to banning all land-based MIRVed mobile systems. That would equate roughly to an agreement for us to ban the MX, and them to ban the SS-24 on their part. It seems to me that that would make a great deal more sense; it would certainly reduce the verification problems we might have. If you miss one SS-25, well, you have got a problem. You have got a 10-fold problem than if you miss an SS-24.

Senator Nunn and I were in Moscow last year and we discussed this with various military leaders and also with Secretary Gorbachev. He did not reject it out of hand, he remained intellectually curious about the proposal.

Chairman NUNN. We were not proposing it on behalf of the U.S. Government.

Senator COHEN. It was a Nunn-Cohen–Cohen-Nunn approach to explore that possibility. But it seems to me that something along those lines would give us the kind of mobility and stability to deal with the verification issue better than what we are doing today. I would like your reaction to that.

Secretary **Cheney**. Senator Cohen, let me comment, first of all, on your discussion of the situation with respect to our German friends. They are friends, staunch allies, good members of the alliance; but we occasionally have differences, and this is one of those times. I like to remind them that they are not the only ones with nuclear weapons on their soil. For over 10 years I represented in the House the State of Wyoming, and we are host to 200 intercontinental ballistic missiles, including 50 Peacekeepers, with 10 warheads each, and that those systems are there not only for the defense of the United States, but also for the defense of Europe. It is the presence of those short-range nuclear forces in Europe that ties the defense of Europe directly back to the strategic systems that we have as well.

With respect to the question of strategic warning, a rail-garrison system would probably require, depending upon what kinds of assumptions you make, 6 to 12 hours to get sufficient dispersal from the operating bases so that you would achieve the effects of mobility in the ICBM force. You can achieve greater survivability, if you will, if you go with a Small ICBM. In effect, the President has decided to do both. In terms of rail-garrison requiring strategic warning, it is not the only part of our establishment that requires strategic warning. As a general proposition, the so-called "bolt-out-of-the-blue" attack has been deemed to be of relatively low probability. We have thousands of survivable warheads deployed that would survive even a "bolt-out-of-the-blue" attack, when you consider our submarine forces and our alert bomber forces.

It is a trade-off. How much do you want to spend for that extra capability? The President has made a decision that he does, in fact, want to do both. One of the strongest arguments for doing rail-garrison is that you will have mobility in your ICBM force at a relatively early date, 1992. Three years down the road we would have some systems deployed. It is the cheap, low-cost option. The missiles are in silos. If you simply take the 50 out of silos and put them on railroad cars, we can do that for about $5.4 billion, we estimate. So that is one of the main reasons we wanted to go forward with it.

In terms of the arms control proposition, we have not yet completed the arms control review that is part of the strategy review the chairman mentioned earlier. I have heard discussed the proposition you have mentioned, the notion of the ban of all mobiles, which has traditionally been our view in terms of arms control, or the notion of banning all land-based, MIRVed mobile missiles, specifically the 24 and the Peacekeeper would be encompassed within that. That is a possibility. My own personal view is that one of the arguments against MIRVing in the past has been that it becomes a rich target for the other side. Once you go to a mobile system, that ratio of warheads is no longer nearly as significant as it once was, because you no longer have a fixed point target to shoot at. I cannot say that it would not be favorably considered as a proposition by the administration; we simply have not made a decision yet.

Senator **Cohen**. Mr. Chairman, thank you. I have just one observation. I think the most important thing is that we have a political truce here at home on the issue. I think if Congress and the executive branch remain in gridlock, the Soviets have no need to negotiate. Indeed, I would see no interest on their part to negotiate. If we fail to modernize then there is little chance, in my judgment, if a START agreement were ever achieved, of having it ratified by the U.S. Senate. And if we fail to modernize ourselves, then I think we have little hope of persuading our allies to undertake a modernization program. So I think that the political truce at home, perhaps, is of the most critical importance right now.

Admiral **Crowe**. Mr. Chairman, can I elaborate just a moment?

Chairman **Nunn**. Absolutely. Let me just say, Senator Cohen, that we do not have a consensus on this subject on this committee, but if you have the proxies this morning, we can reach one quickly. [Laughter.]

Admiral Crowe.

Admiral **Crowe**. I just want to comment on the latter subject. Our position, of course, in the negotiations has been to ban mobiles, and if we are to drop off that ban, to first of all, resolve the question of verification on mobiles.

I am not aware of the agreement in principle that you were talking about, made at the summit. The subject was discussed, and, of course, it has been discussed at Geneva for quite some time now. It is a thorny subject and we have not reached agreement on the details. Even if you can say we are going to have agreement on the principle of maybe some kind of garrison arrangement so we can verify, the devil is in the details. And we are a long way from that. That is one of the main reasons, when people ask me about the prospects for START and so forth, I personally think it is going to be protracted and agonizing, and this is one of the reasons it is going to be.

Senator **Cohen**. Admiral, the history of negotiating with the Soviets has always been, be wary of agreeing in principle and then dealing with the details later, because you get locked into the principle, and then they argue over the fact that you are breaching the essential principles.

Admiral **Crowe**. I would agree 100 percent. That is the insidious part of verification. There is no way to agree in principle on verification. If you cannot agree on the nitty gritty, you do not have anything.

Senator **Cohen**. Thank you, Mr. Chairman.

Chairman **Nunn**. Thank you, Senator Cohen. I believe Senator Bingaman is next.

Senator **Bingaman**. Thank you, Mr. Chairman.

SDI PROGRAM

Mr. Secretary, I will change the subject here slightly and ask you a little about the SDI program. The "Brilliant Pebbles" part of that program, which I gather will take a substantial amount of the $4.6 billion that you are suggesting for this next year, is a concern to me. My understanding is the ABM Treaty prohibits testing of space-based components of ABM systems in space. General Abrahamson did a departure memo when he left, as I understand it, indicating that he hoped that deployment of that system might occur in the 1994 to 1995 timeframe. If that is true, I would ask you if that is your estimate, and if so, would we be justified in expecting space-based testing of that system to occur in the 1991–1992 timeframe?

Secretary CHENEY. Senator, I can sketch out what we have tried to do with SDI. Of course, you have several key components of the program. In effect, what we have done with the $1 billion reduction is to keep alive both the ground-based and space-based interceptor.

"BRILLIANT PEBBLES"

The new wrinkle is that we will spend a fair amount of those resources in the next year or two studying the "Brilliant Pebbles" concept. If "Brilliant Pebbles" does not work out, that is, if we find some flaw in that basic concept, then the decision to cut $1 billion in 1990 will have the effect of deferring, by about 2 years, any potential development of the current space-based interceptor program; not "Brilliant Pebbles," but what we are currently working on. I am unable to determine today whether or not "Brilliant Pebbles" is going to work. It is an interesting concept. If it works, we think it will allow us to save a significant amount of money on the overall architecture of your space-based part of the program. That is one of the reasons we want to pursue it.

In terms of ABM compliance, we do have a review committee set up to look at all of these questions and to review each of these items with respect to compliance. "Brilliant Pebbles" or any other concept we look at, will, in fact, be scrubbed through that process. Certainly we are not about to embark upon an activity that would breach the ABM Treaty. That is a decision, ultimately, the President would have to make.

The notion that by 1991 or 1992 we would be in a position of testing in a non-compliant mode, I do not believe is accurate. I would be happy to get you the details on it, but I believe the point at which you have to address that problem of compliance is farther down the road.

Senator BINGAMAN. But you are suggesting that you have committed a substantial amount of the SDI budget to exploring the feasibility of a program and that you do not know whether or not the testing of it violates the ABM Treaty?

Secretary CHENEY. No, that is not what I am saying. I am saying that we are committing a portion, not a substantial portion, but a portion of the SDI program to explore the "Brilliant Pebbles" concept. If you were ready to deploy "Brilliant Pebbles," obviously you would have to address the ABM question.

Senator BINGAMAN. But even if you test it, as I understand the broad interpretation of the ABM Treaty, the physical principles involved in this "Brilliant Pebbles" program were certainly known in 1972, and therefore, even the testing of that would, in fact, violate the ABM Treaty; that is the information I have received. Is that acurate?

Secretary CHENEY. What I am saying, Senator, is that before we test any of these programs, they will be scrubbed through the compliance committee that has been established to address specifically that question. We will not proceed unilaterally to test a system in violation of the ABM Treaty.

Senator **Bingaman**. Well, I appreciate that. I guess I would feel better if we did not proceed to spend a great deal of money on a program without first determining whether or not the testing of it would violate the treaty, because my indications are that it is virtually agreed by all who have looked at it that the testing of this system——

Admiral **Crowe**. That is not true, Senator. It is not agreed by everybody. It is a controversial subject.

Senator **Bingaman**. Who disagrees?

Admiral **Crowe**. A number of people involved in the SDI program.

Senator **Bingaman**. I have not heard from them. I would be anxious to get more information on that point of view.

Admiral **Crowe**. You are right that there is a respectable argument on that, but it is an argument that is controversial.

Senator **Bingaman**. I would be anxious to hear the other side. I have just heard the one side to date.

ACQUISITION REFORM

I know you have been there a short period. In the area of acquisition reform, you have a statement in your prepared materials that indicates—Mr. Chairman, has my time expired? I see a red light on there.

Chairman **Nunn**. We have been very generous with time this morning starting with the chairman, Senator Bingaman, so I am not going to interrupt.

Senator **Bingaman**. Let me finish this one question then, and see if I can get a response to it.

Chairman **Nunn**. I think the lights are irrelevant this morning. We will just go by notice.

Senator **Bingaman**. OK.

Chairman **Nunn**. But if somebody gets to the end of a question, go ahead and finish.

Secretary **Cheney**. The witness would note that the light has been red ever since I walked into the room.

Senator **Bingaman**. That should be a signal to you. [Laughter.]

In the area of acquisition reform, we need to get some people in key positions in order for us to know who to really interact with. The positions I have in mind are the Under Secretary of Defense for Acquisition, the Deputy Under Secretary of Defense for Acquisition, and the Assistant Secretary for Production and Logistics. I was wondering if you could estimate for us when we might receive those nominations in this committee?

Secretary **Cheney**. Senator, we have made choices in a number of key slots on the senior core management team at the Department. Many of those recommendations are now over at the White House awaiting clearance. Ultimately, they get announced by the President because they are Presidential-level appointments. But we are working very aggressively to fill all the senior posts down there. I appreciate the cooperation of the committee in scheduling confirmation hearings. I think you are aware of one of the big problems we are having. It has just become enormously complicated to get people through what is an ever more complex coordination process.

Specifically, with respect to the Under Secretary for Acquisition, I have an offer out that has not yet been accepted. But I would expect, if all goes as planned, to have, within the next couple of weeks, filled that position. Then we will go through the normal clearance process to get him before the committee.

Senator BINGAMAN. Thank you very much.

Thank you, Mr. Chairman.

Chairman NUNN. On that point, let me just announce here if we can get two more Senators, if we can get a quorum here, we plan to vote on Mr. Wolfowitz' nomination. And we will interrupt just briefly to do that. We have been waiting to get to 11. We have Mr. Garrett's hearing this afternoon and, as far as I know, that is all the nominees we have up here officially at this point in time. We are trying to move them as rapidly as we can. And, Mr. Secretary, we have set aside a certain time each week so that as they come up we can process them as rapidly as possible.

Secretary CHENEY. The committee has been very cooperative.

Chairman NUNN. I believe, Senator Gorton, you are next.

Senator GORTON. Thank you, Mr. Chairman.

SHORT-RANGE NUCLEAR MISSILES

I understand, Mr. Secretary, that during my absence, both the chairman and Senator Cohen brought up the subject of the West German position on short-range nuclear missiles in Europe and got some comments from you. So I run the risk of either making or receiving redundant remarks. Nonetheless, I would like to pose a hypothetical question to you. If a Senator or a Congressman or, for that matter, a Secretary of Defense, reached the conclusion that the position of the West German Government on both modernization and on negotiations, with respect to tactical nuclear missiles in Europe, is final and irretrievable, not only because there is an election late next year, but because that position could not be abandoned even after an election due to public opinion in West Germany; and if someone in my position believed, as apparently you have testified, that the danger of beginning any such negotiations now is that they would inevitably lead to the proposal of a zero option, and in all probability, the acceptance of that, the zero option; and if one believed that American troops in Europe were put greatly and unduly at risk by being in there in the numbers in which they find themselves, without that kind of option, would that not lead, inevitably, to the conclusion that it should be the policy of the United States, beginning immediately, that a substantial percentage of our ground commitment to NATO should not be brought home to allow the West Germans a much greater responsibility for their own defense as a result of their defense philosophy?

Secretary CHENEY. That strikes me as a hypothetical question, Senator.

Senator GORTON. Perhaps you will tell me some of the facts in it with which you disagree?

Secretary CHENEY. Let me speculate for a moment, if I may. There are a couple of ways to work at one of these problems within the alliance. As I said earlier, we clearly have had differences before. We are 16 sovereign nations; we do not always see things eye to eye. We all have to deal with democratic political bodies at home, and all the pressures that entails. I think it is important not to overdramatize the nature of the current difference. I mean, it has received a lot of attention, a lot of press focus. It is important within Germany; it has become important within the alliance. But the Chairman made the point earlier that it was important not to allow this particular issue to dominate the summit to the extent that we then avoid talking about the really big questions that are before us, in terms of how NATO ought to approach Eastern Europe and the Soviet Union in the months and years ahead. That is one way to work it.

The other way to work at it is let us spin out this scenario you talk about and assume that there develops within the alliance a substantial body of opinion on the part of a number of nations that, in effect, says we ought to go to zero on short-range nuclear forces. I do not think there is any question that this scenario would raise serious questions about the basic fundamental strategy we have pursued for 40 years. We are, in fact, forward deployed. We believe in the notion of flexible response; that is NATO strategy. That has been NATO strategy for a long time. Nuclear weapons are a key component part of that. And I, as Secretary of Defense, would have something of a stomachache if we were to find ourselves in a position where, in fact, large numbers of our NATO allies were urging us to maintain our conventional forces in Europe but to take out all of the nuclear weapons in Europe.

Now, what our posture would be at that point, I cannot say. I do not know. We have not considered it. It has not gone before the President. Obviously, there would be a major shake up within the alliance if we were to head down that road. I think that, just as there is an obligation on the part of the United States to be somewhat restrained and cautious and deliberate in terms of how we proceed on the possibility of troop drawdowns, the reduction of our commitments, and the need to consult and develop alliance-wide postures, there is also an obligation on the part of our allies to do the same, and not to adopt positions that strike at the heart of the strategy without having first developed an agreed-upon alliance-wide approach to those issues.

Senator GORTON. Mr. Secretary, you have my undying admiration. Your answers are already much more diplomatic than they were even last week.

Senator CHENEY. I am learning, Slade.

LOW-INTENSITY CONFLICTS

Senator GORTON. On another subject, as I remember your testimony before this committee at the time of your nomination, and Admiral Crowe's, and much of the other testimony that we received from people attempting to determine what the world and the kind of threats with which the United States might be faced would be like even a relatively few years down the road, there was a considerable emphasis on low-intensity conflict with perhaps Grenadas and hostage rescues and situations of that sort being much more likely than any major conflict in our future. It seemed to me that there has been a fairly common agreement that this is likely. You emphasized in your earlier testimony the need for readiness. I note with some concern, however, that the one major system, which you have simply seen fit to cancel lock, stock, and barrel, is the Osprey, which, of course, is designed primarily, or very substantially, for exactly the kind of mission and prospect which seems most likely. How is the cancellation of that particular system, which seems to have no parallel with any of the other services, consistent with a concern for low-intensity conflict?

Secretary CHENEY. Senator, as I mentioned in my opening testimony, probably the most difficult decision I had to make in putting together this budget was the decision to cancel the V-22.

V-22

I am not here today to argue that there is any fundamental flaw in the V-22. I think it is potentially a very useful system, a very nice capability to have. The problem that we are faced with is that the only way I can keep all of the programs in a reduced budget is to buy everything at inefficient rates, to stretch out the buys, to raise the unit costs of everything; and that gives us short-term savings and long-term chaos in the defense budget. Other options, of course, are to cut those things that affect personnel and people, and the quality of life issues. I think that would be far more devastating than not buying a system.

In my opinion, while the V-22 is a very nice capability to have with a significant impact in terms of special operations, we are only talking about a total of about 50 to 55 aircraft for that specific purpose; the bulk of the buy was for the Marine Corps. The Army is not in the program and the Air Force is not playing in a significant way.

So we end up spending a lot of money, $20-some billion, for a nice capability, but one that I deemed not to be as significant as some of the other things that we are committed to. It is strictly an issue of affordability. If we had an extra $2 billion, or the committee can come up with the extra money over the course of the next 5 years, we would love to put it back in the budget. But the situation we find ourselves in is having to cut. So the decision I made was to terminate the V-22 and provide that lift capability for the Marine Corps with helicopters, just as we're going to do for the Army.

Thank you, Mr. Chairman.

Admiral CROWE. Could I make a comment on that, Mr. Chairman?

Chairman NUNN. Yes, Admiral.

Admiral CROWE. Senator, I would like to say two things. First, sitting where the Secretary and I do, you must always remember that one of the reasons that low-intensity conflict has become so important is that we have done very well at the other end of the spectrum. The reason that this has become more important is because we have managed to tamp down the possibility of other kinds of conflict.

Second, I would just reinforce what the Secretary said. I have testified every year that I have come up here that there are great risks in our budget. I just said in my statement that there are going to be even greater risks this year. You are putting your finger on a risk, but there are risks in this budget. The decision to have risks was made when we went to the top line, when we said we are going to reduce. What we essentially said that day was, we are not going to have Cadillac systems because we do not have the money. But we said we are going to have more risks. And I imagine, I have seen this before, that many Congressmen are going to point out risks in our budget. But that should not be surprising, they are there; we have always said they are there.

One last comment on low-intensity conflict. If Congress really wants to do something about low-intensity conflict, in my judgment, the number one thing they could do is get some security assistance for us to put into some of those smaller countries where the threat is, that need our help, that can build up their own institutions to deal with this kind of thing. Security assistance, in that regard, has disappeared as an effective foreign policy tool, and I could not overstress it.

Chairman NUNN. Thank you, Admiral Crowe. That is the second time you have made that point very strongly, and we have taken note of it. I assure you, it is a very important point. And you include in that also the IMET training?

Admiral CROWE. Absolutely. Yes, sir.

Chairman NUNN. Senator Glenn.

Senator GLENN. Let me follow up on Senator Gorton's comments. We discussed this very briefly yesterday on the telephone, Mr. Secretary. Your comments before over at the House, I believe, were to the effect that you saw this as a ship-to-shore aircraft as much as anything else. Senator Gorton brought up the low-intensity conflict and the brush fire wars and things like that for which this would be useful. And I believe a remark was made that Inchon was the last time we needed something like this to make a faster landing. Well, we have not needed lots of things since World War II or Vietnam or Korea, but we do not buy things on that basis.

V–22

We are 9 years into the V–22 development program and we have spent about $2 billion on it. It is ready to go. The Marine Corps has been revising their tactics to take advantage of this unified capability. The Army, contrary to what you said a moment ago, is following this very closely; they are very interested. And that would be the follow-on. It gives us more than double the range and double the speed of any way we have right now of putting troops in a particular spot in a big hurry. Admiral Crowe has stressed in his statement the need for mobility. If I ever saw anything that increases our mobility, this is it. And instead of stretching the V–22 program out, you chose to terminate this one.

Another thing, too, this is self-deployable. It can fly to anywhere in the world. It does not have to have the ships to carry it there like we have to do with the helicopters. It has the ability to get there.

To transport the CH-53 or 60s, we are going to need additional ships. I do not know which aircraft you are finally going to come down on to replace the V-22.

It is also my understanding that one of the major opponents of the V-22 has been Mr. David Chu who heads up your PA&E, and he was the one that has been against the V-22 right from the start, as I understand it. Aviation Week had an article that said that in his study of it, that he recently found that his alternative to the V-22 was in fact more expensive. It goes on to say you still decided to cancel the V-22 even after he found he was wrong.

What are we going to replace it with? When do we get it? What is the cost? It is my understanding that the cost of an alternative will be greater than going ahead with the V-22. We have termination cost and we will have a lot of additional charges.

One of the immediate problems, as I discussed with you very briefly yesterday, I have been told that the company is actually terminating the V-22 development effort as of the day after tomorrow, on Friday. Work will stop on this program that I think gives us an enormously increased combat capability for bringing troops together. The Marines, yes; and most likely the Army later on.

Quite apart from that, one of the big reasons that Barry Goldwater, former chairman of this committee, supported this program so strongly was the enormous potential commercial spin-off of this airplane. It is like the KC-135 that led to the 707, that was to become the standard airliner of the world for so many years. It is like both an airplane and helicopter and will have the capability of tying communities together.

The V-22 has such an enormous potential for us and for around the world in sales, where our aircraft industry has led sales around the world. So it is military, it is commercial, we are 9 years into this program, and I was very, very surprised to see the decision made, particularly when, if the reports are correct, any replacement is going to be more expensive than going ahead with the V-22 development.

That is more of a statement than a question, but would you comment on any or all of the above?

Secretary CHENEY. Certainly. Senator, let me come back again to my earlier remarks. I did not come up here today to trash the V-22. All the things you say about it, in terms of its capability and what it would be able to do for the Marine Corps and special operations, as pointed out by Senator Gorton, are true. It would be a nice capability to have. But how are we going to pay for it? What are we going to cut if we put the V-22 back into the budget? What, then, is going to come out? Are we going to reduce some more force structure? Are we going to cut readiness? Are we going to reject the pay raise for the troops?

My problem is a top line that I was given within which I had to operate. Now, I mentioned at the outset, going back to 1986, if we added up all the programs that Congress and the President approved in 1986 and funded them for fiscal year 1990, we would be at $479 billion today. We are down to $305 billion. Now, the only way I can get there is if I keep taking stuff out of the budget.

Senator GLENN. I understand that.

Senator CHENEY. If I stretch out everything, then I find myself in a situation where we are running an extremely inefficient operation; where we are wasting resources because we are spending more money buying systems that we could not afford if we did not have as much money as when we first got into them. Let me touch on a couple of other points.

COMMERCIAL POTENTIAL

I think the commercial potential is probably there. If it is, then I would assume somebody will pick up the work that has already been done and the investment that has already been made and make a go of it. If they do, then we will be happy to come back down the road when we have more money, and Congress sees fit to give us a higher appropriation, to see if we can pick up that capability in some military version.

The notion that the replacement is going to be more expensive. The evidence I have is contrary to that. I think that savings in fiscal year 1990, in terms of gross dollars saved by canceling this, is $1.7 billion. When you add back in what you need, by way of the CH-53 and the 60 helicopters, the marinized version of the Blackhawk, the total savings works out to about $1.2 billion. It is roughly $7 billion, a little over $7 billion over the FYDP that we save with this particular cut.

The notion that alternatives are more expensive. Well, it is interesting when you go through one of these exercises. When we ask the Department to come up with the cost estimates of what it would cost to replace that lift capability if you do not do the V-22, interesting requirements all of a sudden develop. For the first time in history, the Marine Corps came up with a requirement for a global positioning system on every helicopter. That adds over $1 million to the cost of each helicopter. I mean, I am still new at the Department but I think you have to be careful about buying some of those assumptions. I think we made the right decision. I think it is a sound decision. I think that, given the choices that were in front of me, this is the right way to go.

Obviously, Congress disagrees. If Congress or this committee comes up with a way to put the money back in the budget, I am not going to object. But again I come back to the proposition, as the Admiral mentioned, that given all of the other things we have to do, given the risk we face from a military standpoint, given the areas where we think the priorities ought to be, the V-22 is not at the top of the list. It came out at the bottom of the list, and for that reason I decided to terminate it.

Senator GLENN. I think my time is up, but let me just make one comment, Mr. Chairman, if I might, on some other areas.

I know we are transferring the F-16s from Spain to Italy. Although I understand the NATO alliance is going to pick up some of that tab, it will still be expensive. We are also going ahead with an Advanced Tactical Fighter while we are trying to do much of that same mission with missiles, from a longer range.

As a former fighter pilot, I hate to question the need for an Advanced Tactical Fighter. That hurts me, but when I have to make choices to improve our conventional warfare, the area where we are most likely to get into conflict, I want to look at all the new programs. I have to look at a B-2 that is coming in at $516 million per copy. We are going to get less than two per $1 billion and the cost is going up and it cannot even fly yet. It will fly one of these days, I am sure. We have so much development cost there. We are going to have an MX rail-mobile system with the limited advance that I think that makes in our overall capability. We have the sublaunched missiles, all the others.

I just think that when we talk about the conventional mobility that we need, when we talk about the advance in combat capability the V-22 gives us, and in particular the low intensity conflict and the small operations where we can fly these airplanes, I can't understand why you are proposing to terminate the program. If we go to helicopters as an alternative, that means additional ships to transport them and all the ships that have to be built to provide that same capability where the V-22 can fly out there themselves.

I would like to see us reconsider some of these decisions on other programs that I think could be a source of funding rather than cancel out this program that we have supported, as I said earlier, the Marine Corps has based tactics on and that Congress has reviewed every year for 9 years now, we have spent $2 billion in development and now cancel it just as it comes up—not stretch it out, not even keep the program alive. It will be dead as of Friday, as I understand it, unless you can reprogram something just to at least let them get through their testing phase, which will be terminated, as I understand it, this Friday. So I think that is a bad decision.

Admiral CROWE. Senator, I would like to comment on one other aspect of what you have said here. The V-22 has been justified and originally prepared, we hoped, for the specific mission of putting ashore an assault echelon. It is not going to replace ships. It is not going to make ships unnecessary. It is not going to make helicopters unnecessary. It was not even designed to support the troops once they are on the ground. It is to secure so we can get stuff on the ground. It allows the ships to stand off, but it does not do many of these dramatic things I am hearing. It does a very specific function, it is a very interesting airplane and we would like very much to have it. But it will not do quite as much as people are saying it will.

Chairman NUNN. Thank you, Senator Glenn.

I believe, Senator Gore, you are next. Let me take just a moment to welcome you back. We have all been thinking about you and your family, and we are delighted you are back and that your son is doing much, much better.

Senator GORE. Thank you very much, Mr. Chairman, and to all my colleagues on this committee I am most grateful for the prayers and for the best wishes. I have previously expressed my thanks to all my colleagues in the Senate as a whole, but I want to say a special word of thanks to the members of this committee and to the staff. I might say I had not intended to say this or get into this, but some of the most thoughtful expressions I received from anywhere in the United States were from members of this staff here, seriously, and I appreciate that very, very much. And from the folks in the defense community and the executive branch also. I am very grateful and glad to be back. Thank you.

NATO

I want to discuss two subjects just briefly in my time, Mr. Chairman. First of all, I wanted to make a short comment on the discussion about developments in NATO. What I wanted to say is that it is not just the position which has been adopted by the Federal Republic that has caused the difficulty. It is also the manner in which they have gone about it. The Federal Republic has traditionally prized allied unity as much or more than any member of the alliance, and yet they have taken steps, primarily Chancellor Kohl has taken steps, that have, we hope, only temporarily damaged the underpinnings of that unity, because the rest of the alliance was prepared to delay the modernization decision. That should have been recognized as a sufficient response to the dilemma in which Chancellor Kohl apparently found himself. To not accept that move but to instead go much further and force a public conflict was, in my view, a serious mistake that has hurt allied unity. It can, of course, and will, of course, be fully restored.

But it is also worth underscoring what I felt was an extremely eloquent statement by Chairman Nunn at the first part of the question and answer period. We have to expect these kinds of problems unless we play our traditional leadership role in moving the alliance toward the future instead of allowing the conflicts of the present to bubble up and get out of control. And in order to lead the alliance toward the future we have to adopt the kind of farsighted analysis that Senator Nunn referred to in his comment. That is just a comment. I welcome any response if you want, but you do not have to respond to that if you do not want to.

STRATEGIC MODERNIZATION

Let me move to the question of strategic modernization because the difficulties within the NATO alliance are in some ways similar to the difficulties we will soon face here in the United States with respect to a necessary domestic consensus on nuclear deterrence. There is an argument in the alliance about extended deterrence. There is an emerging argument in the United States about nuclear deterrence in its most basic form. And, just as is the case with the problem emerging in NATO, the debate here has as one of its focal points a question of how we modernize a key part of our weaponry.

Admiral Crowe stated it very succinctly in his oral comments here, I wrote them down but may not have gotten them exactly correct, Admiral. I heard you say that strategic deterrence is the foundation of our overall defense strategy and posture, and our top priority where strategic deterrence is concerned is to resolve the mobile missile issue. I agree with that.

You said in your statement, Mr. Secretary, that the package or the proposal that has been outlined by the administration resolves this issue. I wish to respectfully disagree. It does not resolve the issue, in my opinion. I am encouraged by your statement that you are open to modifications in the proposal that has been outlined. I think there have to be modifications. I think that if this is the end of the administration's thought on the question then by far the most likely outcome will be the defeat of the rail-garrison proposal; the defeat of the Midgetman proposal, leaving us in a very precarious posture; a B-1 program in serious trouble; a B-2 program in serious trouble; no ICBM program to modernize our force; and rapidly-changing perceptions among the American people of the Soviet threat just as perceptions in Europe have been rapidly changing in the wake of INF and the ongoing changes engineered by Mikhail Gorbachev.

The presentation here today came across to me—and I do not wish to say this critically; I wish to say it only as a way of trying to convey to you the message given to Congress and the message heard by Congress in the kind of presentation here—the message I think comes across as we are going forward with the MX and we are going to think a little bit more about the Midgetman, and we are going to ask you to take on faith an arrangement which we may or may not be able or even want to go through with, at least some of us.

Now, there have to be, in my view, two kinds of changes if the Bush administration and the United States of America as a whole are going to be able to seize this historic opportunity to in fact resolve the modernization question on the eve of what could be the most important strategic arms control talks in history. First of all, there has to be a change in the approach of the administration to Congress similar to the kind of change that Chairman Nunn outlined in this suggestion for a new kind of leadership dialogue offered by the United States to the rest of NATO. We have to hear a different message. We have to hear the administration come up here and say we know what we want to do, we are for the single warhead mobile missile for the following reasons—and if you need the text that follows that column General Scowcroft can write that for you very quickly. And we have to hear you say we are for it not as part of some political arrangement that we may or may not be able to follow through on, but we are for it because it makes sense in terms of our strategy, in terms of our vision of the future relationship between the United States and the Soviet Union.

The proposed tradeoff in the arms control talks of the MX for the SS-24 was referred to earlier as the Nunn-Cohen or Cohen-Nunn proposal. It could as well be referred to as the Bush-Scowcroft proposal or the Bush proposal because they have discussed it actively for some time, as one of many options. I think it makes a lot of sense. But if it is an active option and if it was actually implemented, then the role of the single warhead mobile missile would be, in a way that was obvious to all, absolutely critical to the continuation of nuclear deterrence. But unless the argument is presented persuasively and clearly in a way that captures support from Members of the Senate and Members of the House who want to help this administration implement a wise strategic policy, unless it is presented persuasively, then the outcome is, as I said earlier, likely that neither system will be proposed and that we will head toward the kind of crisis of confidence that NATO is now undergoing.

The second set of changes that has to be made have to do with the details of the package you have discussed—the sequences, the timing, the levels of funding in each given fiscal year. And they ought to be the subject of discussions between the administration and Congress. I think those changes ought to be forthcoming pretty quickly or else in the current budget environment the opportunity will be lost.

My time has expired but I have said what I wanted to say. I welcome any response that you might have.

Secretary **Cheney**. Senator, I guess I am puzzled by your response. The President has made a very clearcut decision. He had said we will go forward with rail-garrison Peacekeeper. That is a modification from the original Reagan plan. The Reagan plan was to have 100 Peacekeepers, 50 in silos and 50 new ones bought to go on the rail-garrison. That was scrubbed. We are not going to deploy 50 additional missiles; we are going to take 50 that are in silos and put them on railroad trains. It seems to me that that was a way to save money but also to add mobility to the force in the short term. He said we are going to build Midgetman, very clear about it—not maybe, not if, not I will make a decision 5 years down the road. We are going to do both.

The package that is before you was structured by General Scowcroft and me and approved by the President. I am not sure what it is you disagree with. You do not want to build MX or you do not want to build Small ICBM. They are both in the program and they are both in the package.

As I explained in my presentation, the dollar amounts are driven by budget considerations, the top line that has been assigned to us by Congress. Now it may well be that the package will be modified. I urge the committee to consider whether or not they can come up with some additional dollars or as they make changes in the authorization process to see if they want to look at the spending profile on this. I highlighted it for the committee because the more efficient way to operate would be to spend more money sooner. But again we have the problem of the outlay limit for fiscal year 1990 that was referred to by the chairman.

This is the President's proposal, Senator. It is obviously subject to change or modification by the Senate, but I do not feel at this point that the administration has an obligation to go beyond what we have already done. If the votes are here to change the package, then I assume the package will be changed or modified in some fashion. But there should be no mistake that the President has made a decision. His recommendation is to do both systems. We cannot do both simultaneously because of budget consideration.

If the committee in its wisdom, and the Senate and the House in their wisdom, can find a way to come up with additional dollars or decide they want to take something else out so you can do both simultaneously, then we will do whatever Congress ultimately decides upon. But in terms of the notion that somehow the administration has an obligation at this point or is not being straightforward or is not being honest in its presentation, that is just not true. This is the President's decision. It is right out there. We put together a good package and now it is up to Congress to work its will on it.

Senator **Gore**. If I could just follow up briefly, Mr. Chairman. I am not challenging you on the question of straightforwardness or honesty. I am challenging you to rethink the manner in which the administration approaches this issue. I would urge you not to look at it in terms of—well, you used the word obligation. Obligation to what? The obligation I think you have is to the long-range future of the country.

Secretary **Cheney**. We would agree that we are worried about the long-range future of the country, Senator.

Senator **Gore**. The point I am trying to make is that if you as Secretary of Defense come here to the Armed Services Committee and say, as you did, here is our package, the MX, it is great, it is the best thing we can possibly do, it is the best thing since sliced bread, and we do not see any problems at all with the rail-garrison program and we think that strategic warning is maybe not all that important, and there is another part of the package, the problem is the money. That was the only statement really made in your presentation about that part of it.

Chairman **Nunn**. Senator Gore, I am going to have to interrupt in a moment because we have gone way over and I am afraid we are going to run out of time. I think the Secretary has to leave about noon. We can come back on a second round, but we have three more Senators here.

Senator **Gore**. All right. I appreciate the time constraints, Mr. Chairman. Let me just conclude very briefly by saying that I think that the package you need to worry about is not just the one presented. It is the one that finally comes out of Congress and there is a very predictable outcome if the current approach is the one which is maintained. I would urge you to change it. Thank you.

Chairman **Nunn**. Senator Dixon.

Senator **Dixon**. Mr. Secretary, may I first say that I have a great appreciation for the difficulty of your situation. You have a tough job at a time of diminished expectations and everything is a challenge for you. As the chairman of a subcommittee that always has a pretty big bogey around here, I have a more limited appreciation of what you are going through than you have personally experienced. But I understand it.

V–22

Having said that, and also assuring you of my enthusiastic support for the kind of job you are doing—and I have been very pleased with your performance right up to this moment—I would like to say that it is quite obvious some of us disagree with the V-22 decision, the Apache decision, and some other things. But we appreciate the problem you have from the standpoint of available resources.

I have to say to you that I feel very strongly that we are not doing enough with respect to force levels in a lot of parts of the globe but surely in Europe. You have suggested here you would bring home 4,000 people as a consequence of the Pershing situation. You might want to correct these figures, but I understand we have got about 320,000 people there, with 200,000 dependents. Is that number about right?

Secretary **Cheney**. That is what is there currently, I am told, Senator.

Senator Dixon. That is over half a million people in Europe. In my Subcommittee on Readiness, Sustainability and Support, we go through these exercises about quality of life stuff in Korea and

Japan and other places. I even certify it is for peaceful purposes in Japan and for military purposes in Korea and all the exercises we do here in that regard.

REDUCING FORCE LEVELS

I think a lot of the chairmen of some of the subcommittees and some of us have expressed that we think there is more we can do on reducing these force levels, bringing some folks back home. I think we could do something on the V-22, something on the Apache, something on some of these other things if we did some of that, and I think there are big dollars there. Could you give me just an overview of what you have done in discussing this in your shop and whether or not you are open to discussing this further during this period where we go into the hearings and then the markup on the DOD authorization bill?

Secretary CHENEY. Senator, as I mentioned at the outset of my testimony, one of the issues I had as priority as I put together the budget was to avoid a situation in which we unilaterally, for budget reasons, now began drawing down our forces overseas. We wanted to maintain our forward-deployed posture.

I would argue, for example, that the reason we are in Europe is not just to help Europe. We are in Europe because it is in our strategic interest to be there. We have believed for 40-some years now that a forward-deployed strategy was by far the best way to go. That may be altered as a result of ongoing negotiations with the Soviets and the alliance in terms of the possibility of conventional force reductions in Europe, in which case we would then be justified in bringing some of the troops home.

But we do have a proposal on the table in Vienna. For us to proceed down the negotiating track not only with the Soviets but also with the allies while simultaneously for budget reasons here at home, start pulling down forces unilaterally, without consultation with our allies and independent of what transpires in those arms control talks, does not strike me as very good policy. So I had guidance worked out with the President and with the National Security Advisor and the Secretary of State that we would try to avoid those kinds of force reductions overseas geared to budget considerations through this cycle.

With respect to saving dollars, bringing them home does not save a lot of money. What saves money is deactivating units. The way you really save money is to take a division that is now deployed overseas on the continental United States and deactivate that unit. That is the only way you really get big savings. If you bring the unit home, you are not going to be spending more money in the United States than you are in Europe, but it is still going to cost you roughly as much to have a base for them and training facilities and all of the support that goes with it.

Senator DIXON. I would suggest that most Americans would support that alternative in any event, even if it does not save many dollars. Let me give you a good example. In 1987, the Spanish Government asked the United States to remove the 72 F-16 aircraft of the 401st Tactical Fighter Wing from their base in Spain. The United States originally intended to deactivate this wing. Subsequently the United States and NATO collectively agreed to move this Air Force wing to a new base to be constructed in southern Italy. My understanding is that this new base at Crotone will be a peacetime operating base for the 401st like the Torrejon base was. In the event of war, the F-16s of the 401st would deploy from Crotone elsewhere for their wartime operating location.

Now my question is, Mr. Secretary, if Crotone is going to be only a peacetime operating base, why could we not station these aircraft back in the United States and then deploy them directly from the United States to their wartime operating location when necessary? That is just one example. I can pursue that. I have more here, but that is a good example of one I know about.

Secretary CHENEY. Let us talk for a minute about the 401st and maybe the Admiral will want to chime in. In effect, you are correct. The 401st is leaving Spain because Spain no longer wanted to host it. When that occurred, Italy stepped forward and volunteered to take the 401st. The 401st is an important unit. It provides the most significant part of our combat capability in the Mediterranean outside of the naval forces we deploy down there. But in terms of that southern flank of NATO, the 401st is a very important added increment.

The relocation to Italy is also, I think, a good example of burdensharing because NATO got together and decided that it would foot most of the bill for the relocation of the 401st to Italy. The infrastructure fund that the United States and others contribute to will pay about 27 or 28 percent of that fund, but we would make that contribution anyway whether it was used for the 401st or not. That fund will be used to finance the move of the 401st to Italy.

Again, it is part of our forward-deployed strategy. You can argue why not bring all of our aircraft home from Europe and in wartime load them up and move them back over there. But then we come back to the proposition that we do have certain basic fundamental commitments. One of our commitments, for example, is that we will have 10 divisions in Europe within 10 days of the outbreak of war. We have just over four divisions deployed there now. That means we have to have the lift capability in the United States to move those forces overseas. One of the limiting factors in terms of moving an F-16 wing, of course, is going to be tanker capability, especially when you are talking about across the ocean, and the capacity to stage all of that lift, given all of our other requirements.

Under the circumstances, the judgment has been that NATO wants to do it, and Italy wants to do it. In keeping with our basic fundamental strategy, our forward-deployed strategy, it makes sense for us to relocate the 401st to Crotone instead of bringing it back home.

Senator DIXON. If I may pursue this—and my time is up but it will be just one question, if I may be indulged in that regard, and it will be short, Mr. Chairman—let me just follow up with this final comment.

Last week I was home doing town hall meetings. I went to Rantoul, where Chanute Air Force Base is going to be closed in the congressional district of our good friend Ed Madigan, who was your Chief Deputy Whip when you served as Whip in the House and, I think, a very fine Congressman, a good friend of mine. The folks at that meeting said here you are closing Chanute. You are just building a $7 million weather surveillance building here, you are building a $4.6 million bachelor officers quarters, and so forth. And they reviewed all that and they said you will not close anything down or bring anybody home from Europe or Korea or Asia or anywhere else. Here is Rantoul, with 20,000 people. You are closing our town, and you continue to let this proliferate all over the globe.

I must say, Mr. Secretary, quite frankly, as a Democrat who has a reputation for being a hawk and suffers at town hall meetings back home for some of his votes for Contra assistance, the Strategic Defense Initiative, and a lot of other things that this and the prior administration have asked for over the years, it gets tougher and tougher and tougher and tougher to defend the positions of this and the prior administration with home folks who are getting hurt while we continue to do this all over the globe.

Now that is the bottom line, and nobody will ever give us an answer except, well, we cannot do it because of our allies, because of Italy and because of Germany and because of Japan and because of Korea and all this other kind of stuff. And I hear it, but I want you to know it is a policy you cannot sell any more back home. I think we have to look at some minimal types of attempts to respond to that kind of concern that I suspect exists in Wyoming, I know exists in Michigan, Illinois, and other parts of this country of ours. End of speech.

Chairman NUNN. I did not hear a question mark, so I will move on to Senator Levin. [Laughter.]

Senator LEVIN. I will try to avoid a question mark, too, Mr. Chairman, because I have some similar sentiments on that issue.

By the way, the figures that I have on that air base that we are moving or propose to move from Spain to Italy is that we will pay more than half of the cost of building a brand new air base in Italy, not less than half. It is something like $450 million of $850 million, according to the figures that we have.

Secretary CHENEY. We will be happy to give you the figures we are working from, Senator.

[The information follows:]

RELOCATING 401ST TACTICAL WING TO CROTONE, ITALY

Senator DIXON. What is the complete cost of relocating the 401st Tactical Fighter Wing to Crotone, Italy?

Secretary CHENEY. The total cost to NATO for relocating the 401st Tactical Fighter Wing to Crotone is estimated at $827 million and the U.S. share (28 percent) is $231 million. Additional U.S. costs for beddown of the 401st TFW at Crotone include the following:

	Millions
U.S. share of bilateral air-to-ground range	$7.0
Recreational facilities	14.3
Non-appropriated money for MWR	4.8
Total	26.1

NATO is pre-financing the costs of construction ($181 million) for 2,507 family housing units at Crotone which we have committed to repay over approximately 10 years after occupancy. In comparison, we are currently paying a total of $23.9 million per year for housing at Torrejon AB as follows:

	Millions
858 leased housing units at Royal Oaks	$12.9
67 government owned units at Torrejon	.4
1,700 members BAQ (226 officers, 1,474 enlisted)	10.6
Total	23.9

We project housing costs at Torrejon AB to be $25.4 million in fiscal year 1994 dollars. The projected costs (operation, maintenance and utilities plus $18.1 million per year purchase costs) for 2,507 units of housing at Crotone is approximately $26.9 million in fiscal year 1994 dollars. Our analysis of the costs for housing at each location projected over time reveals that we would complete repayment to NATO for the Crotone housing in 10½ years and our cumulative savings at Crotone over 20 years will exceed $150 million when compared to Torrejon AB housing costs.

When the agreement was reached for the 401st TFW to depart Torrejon AB, the United States decided unilaterally to relocate the additional three units at Torrejon so that we could close what would become a small inefficient base. These costs are separate from Crotone and would be necessary regardless of where the wing was relocated. These costs estimates are as follows:

	Millions
Relocate HQ 16 Air Force (fiscal year 1992)	$8.0
Relocate MAC terminal	10.0
Relocate DCA equipment	14.0
Total	32.0

Senator LEVIN. I am afraid that is rather typical, an expense that I think is very dubious given all kinds of factors, including the fiscal constraints on the budget, including the burdensharing argument, including the peacetime status of that base, so that it is relatively easy to get our planes to Europe, where they would then go to war rather than to put them in a staging area where they have to fly to other air bases in order to get ready to go to any war. So I share some of that sentiment and I hope that Congress will do more than you have.

I notice that you do reduce some of the INF forces, but you gave the Army an instruction not to take all the 8,000 cut in their structure from those INF forces, so that you did not ask the Army where you would take the 8,000. You said do not take all of them from the INF forces. I do not want to spend my time asking for your response on that except for the record, if you would tell us why that direction was given to the Army rather than letting them decide on a military basis where they would reduce the 8,000. I would prefer that for the record so I can get into some of the other issues which we have talked about here this morning.

[The information follows:]

In fact, the Army was given the direction to take the reduction where they deemed it most militarily prudent. Accordingly, the Army reduction balances the requirements for overseas structure as well as the sustaining force and rotation base for the Army structure.

ICBM MODERNIZATION

Senator LEVIN. One of them is the question of ICBM modernization. Admiral, you have indicated that the most worrisome challenge that we face is in our conventional capabilities, NATO versus Warsaw Pact. As a matter of fact, it is the feeling that we are inadequate in that area, which is driving us to take such a strong position as we have taken on Lance modernization. That kind of gets to the heart of the position which we have taken. So it is something you feel strongly about, and I think many people in the alliance feel strongly about.

Now in response to that, that kind of feeling that we ought to improve our conventional capability so as to reduce our reliance on nuclear weapons, so as to be able to better defend ourselves in Europe, these are some of the things we are doing in the budget: Cutting or eliminating all of these conventional weapons systems—Apache and Blackhawk, cut; Hellfire air-to-ground missile, cut; HAWK and Stinger missiles, cut; MLRS, cut; in the Navy and Marine budget, F–14D and the V–22, canceled; the F/A–18 and the E–2C aircraft, cut; TOW missile, cut; Stinger missile, canceled; in the Air Force, the F–15E, canceled; F–16 buy, reduced; the Sparrow, the Phoenix, the Sidewinder missiles, canceled; AMRAAM, HARM, and Maverick missiles, cut. Those are some of the cuts in the conventional side.

At the same time, you are recommending that we put in two new land-based mobile ICBMs. I have heard some of the other remarks this morning. I know the kind of pressure that you are under to try to achieve some kind of a solution to the deadlock over which is better, MX or Midgetman. I have heard a lot of folks—probably a majority in Congress—who feel we need one new system. I have heard some folks who think we do not, that we have a robust deterrent without a new land-based system. I happen to fall in that latter category. But it is a minority category. I think most people think we either should have one or the other. I must tell you I do not know more than a handful who really believes we need both.

The reason you are proposing both is a solution to a political deadlock. There are Midgetman supporters. There are MX supporters. There has been no resolution of that conflict, and the solution is a rather typical one which is proposed. Do both. I will support your missile if you will support my missile.

Folks, we just cannot afford to do both. Whether we need to do one I think is an important debate and I think reasonable people really can differ on that issue. But I do not see how we can afford to build two new land-based mobile nuclear systems when we see a proposal for cuts in conventional forces such as we are seeing proposed here and when that goes to the heart of the problem in Europe, which is putting terrific strains on the alliance. Admiral, I could not agree with your comment more——

Admiral CROWE. Senator, are you telling me this or are you telling the Senate this?

Senator LEVIN. I am telling both of us this, because you are proposing this budget. This is your budget that you are proposing, and I think the straightforward answer to why you are proposing two missiles is you do not see any other alternative to ending this deadlock, except to propose two new missiles.

Admiral CROWE. It is important to end the deadlock.

Senator LEVIN. It is important to end the deadlock, but it is also important, it seems to me, to make sensible decisions. And the I-buy-your-missile-if-you-buy-my-missile approach is not a sensible way to end this problem. We need a new bomber. We got two because some people wanted the B–1 and other people wanted Stealth. So we ended up saying let's do both, and as a result not only did those two systems suffer but we lost some money which we could have usefully spent elsewhere.

Now my question, Admiral, is this. Given the cuts that you are proposing in this budget—and I know you are not at all pleased with these cuts on the conventional side—and given your deep feeling about we should not be straining this alliance because alliance unity, cohesion, in your opening statement, has been probably the strongest reason we have had deterrence in Europe—as I think you said in a parenthesis, who would want to fight all those countries at once—given that strong feeling on your part, do you think it makes sense for us to be building two new mobile land-based missiles? What is your personal view on it?

Admiral CROWE. Are you trying to get me fired, Senator? [Laughter.]

SMALL ICBM MISSILE

We have testified—when I say "we," the Joint Chiefs of Staff, of course, consistently in previous years on this issue—that we would prefer the rail-based MX missile. There are a number of reasons for that.

First of all, it is a missile in being, a very fine missile, probably the finest ICBM in the world. We have gone through the R&D. It is one that is operational, and we can make it mobile and achieve most of the things that you want to achieve with a mobile missile.

It has been criticized for a couple of reasons and has led the critics to go to proposing a Small ICBM. The criticisms are interesting ones. Incidentally, there are other ways to get the single warhead missile. We do not have to build a Small ICBM. But we can build it and I suspect that if the Chiefs had unlimited resources, we would prefer a Small ICBM missile.

The decision was made when we went to these kinds of top lines that we are dealing with today that we are not going to have everything we want, all the luxuries we want, and we are not going to have Cadillac systems, and we are not going to plug all the holes in the U.S. military. In that view the Chiefs have historically testified for an MX missile.

I still believe, more importantly, that today, for example, I do not hear complaints about today's posture. Today's posture, we have got the same sort of problem but we have a large portion—and I would prefer to go into closed session to be specific about this—we have a large portion of our order of battle ready to go on immediate, day-to-day alert to avoid the surprise attack business.

And the latest study that came out—I have forgotten the name of the Commission—the personnel have changed so often and I think you were on the Commission—in any event, that Commission said they were not complaining about today's posture. What they were worried about, which was the main argument for a SICBM, was in the future and what was the threat they foresaw in the future that they were trying to counter.

That was the depressed trajectory missile and the ultra-quite submarine, both of which are a possibility, both of which, if they materialized, would be a very interesting and difficult threat. But to begin with, we have not seen the steps necessary or the research necessary or the testing necessary to lead us to the belief that the Soviets are going to the depressed trajectory missile. They may very well do that, but we do not have that indication at this moment. The same way on the kind of submarine that we are worried about. It has not materialized and it will be quite some time before it does, if it does.

In the Chiefs' view, that means that we have time to monitor, follow, and, if it is necessary—and I believe it is because of the money to build a Small ICBM, and stretch out our money—that the logical way to do this would be to build the Small ICBM second, and particularly in view of whatever the threat is developing.

If it changes from today and we have to have it, we have it. If it does not change from today, I am not so sure we should have it—my personal view. If, in fact, we are concerned about immediate readiness in that small period of time from 0 to 6 hours which Secretary Cheney referred to that the rail MX would have to deploy, there are many things that we can do to improve our day-to-day posture now. For example, we can put more bombers on strip alert. We can deploy some more submarines at sea which gives us our day-to-day alert. There are a number of ways. Incidentally, if you get the rail MX, you can put some of it on the rails all the time if you have this kind of problem.

I agree it may produce some environmental problems and it may produce some interfaces with the public that we do not like. But all of these systems are going to do that. We have trouble building nuclear submarines. We had all kinds of protests against that. We have sort of outlived that problem, but we certainly had opposition in the beginning.

All things considered, I personally, in response to your question and given our financial constraints, would prefer and favor the rail MX. If I had unlimited resources and, like so many things, I would have different weapons systems, I would be a strong supporter of the Small ICBM.

Senator **Levin**. Instead of MX?

Admiral **Crowe**. We already have MX.

Senator **Levin**. Instead of rail garrison?

Admiral **Crowe**. If I had one single system to choose from, of course. The MX can be ready quicker. The Small ICBM will take longer. The Small ICBM is going to cost us a lot of money, and I no longer have the luxury of shopping without worrying about what return I am getting on my investment.

Senator **Levin**. My time is up. Thank you.

Chairman **Nunn**. Senator Levin, thank you.

Senator Wirth.

Senator **Wirth**. Thank you very much, Mr. Chairman. Gentlemen, thank you very much for being here.

NOT HEEDING WARNING

Let me ask a follow-up on Senator Levin's question about not heeding warning, that there have been times like the German attack, Pearl Harbor, and the 1973 war in which warning was not heeded. Isn't the rail garrison, the MX, a reflection of a different side of that problem? What if we misread what is going on and send the MX out of rail garrison on the tracks? Does that then become or could that become a very provocative move, that we misread what the Soviets are doing or misread world conditions, send the trains out on the tracks with the MX on them and then the Soviets look at that and they say hey, look, what are they doing? They are sending their missiles out, something must be happening. Why would that not be very provocative or have the possibility of truly escalating what might be a tense situation?

Secretary CHENEY. Well, I have a couple of responses to that, Senator. First of all, putting the MX out on the rails does not increase the total number of missiles on alert because you can fire the MX from garrison. That is to say you are not going to add to the number of warheads.

Senator WIRTH. Yes, but if you have got them trotting out on the tracks you have decided you are going to change the situation.

Secretary CHENEY. Yes, but when you put them out on the tracks what you do is increase their survivability, but you do not increase the total number.

Senator WIRTH. You must be increasing their survivability for a reason, which is that you think——

Secretary CHENEY. May I finish my answer, Senator?

Senator WIRTH. Yes, go ahead.

Secretary CHENEY. You are not increasing the total number of warheads targeted against the Soviet Union. At the same time that you make the decision to move rail garrison, the Peacekeeper, out onto the tracks, you do several other things as well, presumably. You could have strategic warning and you would at that point increase the alert status and disperse your bomber force. You would have bombers all over America at air fields loaded up and ready to go, dispersed away from their home fields, which is presumably also going to be a fairly visible activity. You are also going to send all your submarines to sea. Those that are in port will be manned and you will generate your full force. The rail garrison is just one of many things you would do under that kind of a scenario. You would have to do all the other items as well. I would expect any President would make that kind of decision if he had strategic warning.

Admiral CROWE. May I add one thing?

Senator WIRTH. Please, Admiral.

Admiral CROWE. We would then have ours on the rail like the Soviets do today, every day of the year.

SOVIET REDUCTIONS

Senator WIRTH. Let me jump, if I can, Mr. Secretary, to a statement that you had made. "We cannot afford to react unilaterally to political rhetoric and proposals that have not yet been fully implemented. We have major questions about Soviet reduction plans for restructuring their forces, and future military spending reduction." These are all legitimate questions. It seems to me that coming out of all of those questions about what the Soviets are doing now presents us with a great opportunity in the area that I have been concerned about for some time and I wish we would give greater attention to the whole arena of confidence-building measures.

If we have major questions about Soviet reductions, it seems to me that that provides us with an opportunity to put together a whole regime related to on-site inspection, verification, and so on related directly to what the Soviets have said they were going to do. We have an opportunity there.

If we have questions about their plans for restructuring their forces, that provides us with a very real opportunity to be sitting down with them in discussions of doctrine, another aspect of confidence-building measures, and that doctrine as it relates specifically to what they say they are doing in Europe.

If we have questions about their future military spending and production, that gives us the opportunity to sit down with them and agree upon how you count various things, how the economics of defense budgets work, and to come to some kind of agreement with them on the categories of expenditures, production, and so on.

The question is, have you all focused on the questions that you have raised, legitimate questions, Mr. Secretary, and focused on these as an opportunity? I ask that because I do not think you have. I think that we have really missed an opportunity, or may be missing one, and I would hope that you as Secretary might go back and look at this, to use the Soviet announced reductions to see if we can verify those, what the plans are for those, use that as an opportunity for developing a whole set of understandings with the Soviets and a whole set of understandings between NATO and the Warsaw Pact. You might want to comment on that. It is really a suggestion and an urging to you. I would be interested in any comment you might have.

Secretary CHENEY. Certainly, Senator. First of all, I think there are opportunities there. While I am not prepared at this point to run out and make decisions about reducing our capabilities because of what is going on inside the Soviet Union, I am prepared to argue that there may well be opportunities there for arms control processes to move forward significantly—conventional force reductions, START reductions, and so forth. I think there are opportunities by virtue of what is currently going on inside the Soviet Union. We are not oblivious to the kinds of propositions you are talking about.

The Secretary of State will leave next week for Moscow for a session with Mr. Shevardnadze. The NATO summit is coming up with the President at the end of May. My good friend, the Chairman of the Joint Chiefs, is off to the Soviet Union in June to continue the exchanges we have had between their military and ours. I have recently invited the Soviet Defense Minister, Mr. Yazov, to visit the United States this year.

The kinds of issues you are talking about here are the kinds of subjects that automatically come up on the agenda for those meetings. So I do believe that we are aggressively pursuing at several different levels opportunities to expand the areas of cooperation, expand understanding, develop more knowledge and information about what the base is from which they propose to cut, and see to it to the best of our ability that we can verify their announced unilateral reductions of force levels.

Senator **Wirth**. That is a good answer, Mr. Secretary. I am afraid that the reality of what you all are doing in the Defense Department and what the administration is doing in fleshing out these opportunities of confidence-building measures is very thin compared to what most analysts believe is possible.

You are new on the job and I understand that. But I would ask you to go back, and ask your people to look at that and make sure that you really understand. I think that there is a tremendous opportunity, particularly given the fact that you have all of the questions that you have.

Let us use the Soviet announced intention on troop withdrawals to develop a whole way of testing what they are doing and verifying it and so on rather than sitting back and saying, well, we have all of these questions. Are we really going ahead and further proposing a whole variety of ways to verify that and to understand what they are doing? I think that there are a great number of opportunities there.

Secretary **Cheney**. Senator, I think you underestimate us.

Senator **Wirth**. Well, I have talked to a lot of the people and I am not sure I do. But I would like you to go back and take a look at that as well.

Let me jump to the budget very briefly in the time remaining to me. I understand your charter and all of the difficulty that you have in facing the budget and I respect the rapid action that you have taken. I have a number of questions which I would like to ask you about that, and I think most of these could be responded to for the record.

REDUCTION OF TROOPS

First of all, on the reduction of troops. I had asked you in a letter of April 25 to focus on the particular agenda at Fort Carson and whether there is strategic importance to having a full division ready to go rather than one of just two brigades rather than three, and I would like to get that response back from you if I might.

Added to that is the question of troop levels in Europe. Some years ago Senator Stevens attempted to put a cap on the number of troops in Europe and the argument was made that no, we could not do that because we had to have added forces for the Pershing. At that time we had about 288,000 troops. The argument which defeated his amendment on the floor was, no, we had to have more flexibility because we had to have added troops for the deployment of the Pershing. Now that the Pershings are coming back it seems to me that perhaps that argument disappears and perhaps you could tell us why we cannot go back to the item suggested by Senator Stevens and the number of troops that we had in 1979–1980.

Related to that, you have in your proposal called for the withdrawal of 4,000 of the 8,000 INF support troops, troops supporting the Pershing. Why not all 8,000? Why are we just going with 4,000? Why not all 8,000? Is there a reason for that? You might be able to give us the answer to that.

Finally, there are a number of specific budget questions. Admiral Crowe said if we cannot agree on the nitty-gritty, you have not got anything. There are some nitty-gritty questions in the budget and you are familiar with these. Your new budget suggests that there will be $299 billion, but that uses OMB estimates for outlays and expenditures. CBO says that is going to be $303 billion. When we go to the process of marking this up, we are going to have to find another $3.8 billion, and perhaps we could get from you early on your analysis of this, why that is not the case, because presumably there is going to be a difference on that.

You also, for your future budgets, both 1991 and 1995, do not take into account, the budget projections do not take into account the changes that you have made in 1990 which change the base down here. So by the time we get to 1991 your budget is going to show a real growth of about 2.5 percent and a very significant bow wave over the next 5 years. That is a bow wave that, added to the current set of bow wave problems, is going to be close to $60 billion. How are changes going to be made? How are we going to account for that? We are going to have a lot more hearings about it, and I ask that question in hopes that we might be able to get a response again for the record from you as to why that is not a real problem.

Secretary CHENEY. If I may, Mr. Chairman, let me comment first on the funding proposition. As the chairman pointed out in his opening remarks, we do not have an agreement beyond 1990. What was agreed to by the President and Congress in the budget negotiations was a 1-year package. We would love to see a 2-year package. It would be our intention as we go through the process to update the FYDP. We have tried as best we could with the numbers we put in the package to come fairly close to that. We may refine it some as we go down the road, but there is no effort on our part to create problems in terms of the so-called real growth of 2.5 percent. Given everything the members of the committee would like to fund, I am going to need that 2.5 percent.

Senator WIRTH. But the problem is that even though there is not an agreement on that you have to make assumptions in the budget based upon that——

Secretary CHENEY. The assumptions we have made are the ones that were given to me by the President. And if Congress and the President can reach an agreement on 1991 we will live within that ceiling. If you can put together a 5-year program, I would love it. I would like nothing better than to have stable, dependable funding at 0 or 1-percent growth over the next 5 years. I can save all kinds of money, and we can avoid the charade we go through every year of saying we are going to have real growth and then always have real cuts. So I would be happy to try to adjust to that.

With respect to the outlay differences, I operate on OMB rules. You operate on CBO rules. Obviously there is a gap there. The estimation of outlays is not an exact science. We have done the best we can. CBO has its requirements. I would be happy to work with the committee and look forward to resolving those differences.

Chairman NUNN. We are going to have to work on that problem. We will have to have a dialogue on it. I do not mean to cut you off, Senator Wirth, but we have——

Secretary CHENEY. I have a couple of other comments, if I may, Mr. Chairman.

Chairman **Nunn**. Our problem is that we have a rollcall vote. Senator Shelby has not yet asked questions, and I would like to give him 6 or 7 minutes. Go ahead and finish if you could, Mr. Secretary.

Secretary **Cheney**. I will be very brief.

The 4,000 Pershing II troops that are not coming out of Europe are being reassigned to other tasks in Europe that the Army felt were priority items in terms of basic support level for the operation over there. You know, we have this idea that somehow we can bring the boys home, bring home the troops from Europe, and bring them home from Korea. We will have everybody here. Senator Dixon will be able to keep his base open in Illinois. The only problem I am aware of is that we are not in danger of being attacked by Mexico and Canada. The enemy is overseas, and the potential adversaries we will be faced with in any conflict are overseas. They are not here in the continental United States.

The heart of our strategy for 40 years now has been the notion of forward deployment. Maybe you want to change that. It is certainly within the purview of Congress to do that, but it should not be done for budgetary reasons. That is why we felt it was very important that in taking the cuts this year we not undermine that basic fundamental strategy which has been so much a part of our security for the last 40 years.

Chairman **Nunn**. Thank you, Mr. Secretary.

Let me announce the schedule from here on. We have a vote now. Senator Warner has not completed his first round of questioning. Senator Levin would like to ask a couple more questions. I am sure Senator Cohen may have a few more.

Mr. Secretary and Admiral Crowe, I would hope you could stay until about 12:30, if that is possible.

Secretary **Cheney**. Certainly.

Chairman **Nunn**. We will go to Senator Shelby now and I would urge members to come back as soon as they can. When Senator Warner gets back we will start right back on the hearing and he will go to his questions.

Senator **Shelby**. Thank you very much, Mr. Chairman.

SDI

Mr. Secretary, I will try to get into two things if we have time. Can you give me your basic impression of the future directions of SDI, especially in the areas of stepped-up research?

Secretary **Cheney**. I am sorry. Do you want to repeat that last phrase?

Senator **Shelby**. Yes. Your impression of where we are going with SDI, especially in the area of research.

Secretary **Cheney**. Well, Senator, I was an advocate of SDI as a Member of Congress. I think the program we have provided here, while it is not quite as robust as President Reagan recommended, is nonetheless a robust program. It will provide for spending $33 billion over the course of the FYDP. That will give us the capacity to continue with aggressive R&D programs in space-based interceptors and our surveillance and tracking systems and ground-based systems as well.

I would hope that eventually we will be able to develop the capacity to deploy a strategic defense system. I think it is important. I think it plays to the great strengths of the United States in terms of our technological capabilities. I think it creates enormous problems for any potential adversary. I think, to the extent that we are moving into an era when a lot of nations besides the Soviet Union are going to have ballistic missile capability and possibly nuclear and chemical weapons capability, it is increasingly important for us to think in a defensive mode. So I think the program has great promise.

It is also true, though, that this is the most complicated technological problem we have ever addressed in the military area, that there are a lot of unanswered questions out there, that developing and applying the technologies that we need to deploy robust defenses is not an easy assignment. For that reason I am not that concerned about the delays that are going to be required if we adopt this budget.

Senator SHELBY. Especially if we keep trying to work out these problems in the research area rather than just rush out.

Secretary CHENEY. I would agree with that.

FUTURE OF NATO

Senator SHELBY. Shifting over—and I know I have just a few minutes here—you have been talking about NATO and the future of NATO and where we are going here earlier today. Won't NATO's future to a large extent depend on the attitude, the political attitude, of the German people in the immediate future and way down the road? You know, NATO is 40 years old now. A lot of things have changed in Europe. Yet some things have not changed. We still have the Soviet divisions there threatening Europe. But the attitudes of the Germans, especially the German people and the younger ones, have changed. They are looking toward economics. They are looking east. So won't the German attitude influence the NATO attitude to a great degree?

Secretary CHENEY. I think you are absolutely right, Senator. The heart of the NATO alliance, of course, geographically, is Germany. In terms of major contribution to the alliance with respect to their military capability it is clearly Germany in addition to the United States. There is no question but what a successful NATO depends upon major commitment from the Federal Republic of Germany to NATO.

I am not as pessimistic as some are about that. I think clearly there are strains on the alliance now. But I look at the last 40 years and I see an enormous success. I see one of the great successes in military-diplomatic history. I mean, we have kept the peace in Europe for 40 years. We have avoided a major conflict with the Soviet Union. The success of that strategy that is founded upon our forward deployment, upon our alliance, and reliance upon our allies, has been enormously successful. At the 40-year milestone, we ought to be patting ourselves on the back and patting our allies on the back for that success instead of mired down in the debate that we currently have over the future of the follow-on-to-Lance.

Now we must do the follow-on-to-Lance. We need to continue to work that problem. But I would hope while there are differences currently between us and the Federal Republic on those issues, on basic, fundamental principles—what our values are, what our common national interests are—there is no question but what Germany continues to be an enormously important ally of the United States. Our posture in the world is heavily dependent upon a good relationship with the Germans.

Senator SHELBY. Mr. Secretary, you understand votes as well as any of us.

Secretary CHENEY. I do indeed.

Senator SHELBY [presiding]. I am going to recess the committee until Senator Warner returns. Thank you.

[A brief recess was taken.]

Senator WARNER [presiding]. Thank you, Mr. Secretary and Mr. Chairman. First, I would like to say that this morning Senators Warner, Thurmond, Wilson, Wallop, Lott, and Coats had a long-scheduled meeting with the President and I hope you accept their absence for that reason. I must say that at that meeting there was a discussion, somewhat led by myself, regarding the Midgetman, and you perhaps are aware of the diversity of views on that and will hear more about it later.

MIDGETMAN

I want to return to that question because while I have not had the opportunity to be here throughout the morning, one or two of my colleagues are concerned that perhaps this testimony may set a framework for saying it is the Senate side on which the President's decision should be rejected.

Now I have spent a good deal of time on this issue in the 11 years I have been in the Senate and at one time as chairman of our Subcommittee on Strategic Forces. I worked in many capacities with General Scowcroft and am familiar with the Commission. I thought that that Commission did an excellent job and it laid the foundation for, I think, the decision that was made by the President, namely to go with both systems. I want to make clear that the testimony of both of you today in no way could be subjected to close scrutiny in a decision or a conclusion drawn that in any way you wish to step aside from the President's decision that we go ahead with both systems on the schedule that he announced. Mr. Secretary, just a simple response.

Secretary CHENEY. That is correct. The President has made the decision and I support it.

Senator WARNER. And, Admiral, likewise. I can see how this decision, if it is not supported here on the Senate side, could really be a showstopper in connection with funding for the B-2, funding for the B-1, and we would end up here in a stalemated situation between the two Houses on the strategic program. That may be sort of a pragmatic political overview, but my decision to support the President—and indeed I enunciated it before he made his final decision public—is predicated on the fact that this Nation must move toward greater reliance on mobility to in turn get a greater degree of survivability, and that the Soviets already have in an operational status, as the Admiral indicated, a rail system. Admiral, is it not true that they have an operational status with a mobile road system, and they are continuing to place emphasis on both systems? Not a single statement thus far or action by Mr. Gorbachev has deemphasized their work on those two systems. Is that correct, Admiral?

Admiral CROWE. That is correct, and their modernization and strategic weapons are going forward across the board.

ARMS CONTROL NEGOTIATIONS

Senator WARNER. And, Mr. Secretary, I would say to you that as President Bush moves forward with his agenda on arms control, in my judgment it is essential that he have on the table a clear determination by the executive branch and the legislative branch to go forward with the concept of mobility in these two systems. Is that not an added strength to his hand that he will be playing in future arms control negotiations?

Secretary CHENEY. I believe that is true, Senator. The Soviets, as you point out, have operational the SS-24 rail system and the SS-25 road-mobile system. If we go forward with both of our systems, there will be a certain parity, if you will, in terms of our having adopted mobility as well. I think it is important. Clearly this issue is going to be very significant as we get into the arms control regime and further work on the START talks, and I think there is a lot to be said for the notion that we would make that commitment to go forward with both systems.

Senator WARNER. To conclude on this, I personally become impatient when I hear that the Midgetman is the House system and the rail is the Senate system and we are both going to hunker down and could see a stalemate. For that reason, to avoid the stalemate we need your absolute support and I think you have given it today. It is my firm judgment that there are clear strategic reasons for both systems, and we had mentioned mobility and indeed future arms control negotiations.

FRAUD, WASTE, AND ABUSE

Let me turn quickly to another subject, Mr. Secretary. Each Secretary has come forward with their own program to work on the issue of fraud, waste, and abuse in the Department. I am not suggesting that you have not done a comparable study on your own, but did you announce today—I again was not present—any new initiatives that you might be taking in that area and, if not, would you be prepared now to address that question?

Secretary CHENEY. I have not announced any initiatives today, Senator. We have, at the direction of the President, a management review under way within the Department. That has been fairly aggressively pursued. Don Atwood, my newly-sworn-in Deputy, has been directly involved in it on the acquisition side. I will be heavily involved in it from this point forward. I have been spending most of my time on the budget. As you know, I presided over the DRB process myself. But we have that pretty well behind us now. Over the course of the next month we will be focusing specifically on the management review process, with a requirement to get back to the

President by the end of May with our specific proposals and recommendations.

Just as a matter of personal style, my preference is to try to fix the system rather than to announce in advance with great fanfare what I plan to do. I think there have been a lot of announcements in the past by people about how they are going to clean up the procurement process at the Pentagon. I am reluctant to make those pronouncements. I would rather deliver on it. But I do have a number of concerns in that area. One of the things I am deeply concerned about is the relationship between the Department and the private sector. That clearly plays when we get into some of the discussions about possible corruption in the contracting process and so forth.

HEALTHY DEFENSE INDUSTRIAL BASE

I think it is also very important for us to remember that we cannot build these systems ourselves. We cannot build the aircraft carriers and the submarines and the missiles without private sector support. We contract that out, and we need a strong, healthy defense industrial base in this country. It is absolutely essential from our standpoint. I saw a study the other day—I believe the numbers are correct—that in 1980 we had 180,000 firms doing business with the Department and that in 1988 that figure was down to about 38,000 firms. There has been a phenomenal dropoff in the number of companies willing to do business with us, partly because we have made it so enormously difficult for them to do so.

I would hope that at some point in the not-too-distant future I can come back before the committee and we can discuss the subject. There may be a number of areas where reforming the process will require congressional action as well as executive action. I was told the other day that there are some 1,600 separate statutes that impinge upon the procurement process in the Department; maybe we could get by with 1,200 or 1,300. I would like to see one of our priorities be trying to streamline the statutory authorities under which we operate.

Senator WARNER. Mr. Secretary, I commend you for that approach. The industry is an essential partner. The number of firms willing to cope with the difficult statutory and regulatory provisions is dwindling. Having had the opportunity to serve in your Department and now here on the Senate side, I formed an opinion after 11 years here and 5 over there that the vast majority of people, in uniform, civilian, and indeed the contractors on the outside, are honest and want to do a fair and credible and cost-effective job for Uncle Sam. I think what you have said now is a recognition of that fact. If I understand you, your management review process, which will be announced—did you indicate about when that could come out?

Secretary CHENEY. I am to report back to the President by the end of May. So it will be sometime after that.

Senator WARNER. Such initiatives as you may be taking, as you say, to fix the system are likely to be incorporated in that report?

Secretary CHENEY. That is correct.

Senator **Warner**. I thank you for your positive attitude on this. It is something that both Congress and the executive branch must bear down on.

I would like to send you a pamphlet that was issued by your Department. There is no reason for you to be aware of it. When I visited one of my defense plants this week it was handed to me. In it is the positive assertion that if you look for fraud, waste, and abuse in your plant, "you are going to find it." I think that runs contrary to the process that we have, whether it is in the judicial process or elsewhere, that you are innocent until proven guilty. I would hope that you might see fit to revise that pamphlet, assuming you agree with me that it pronounces a fact which should not be made by the executive branch.

Secretary **Cheney**. I am unaware of the pamphlet, Senator, but I would be happy to review it.

Senator **Warner**. I thank the Secretary.

Thank you, Mr. Chairman.

Chairman **Nunn** [presiding]. Thank you, Senator Warner.

Mr. Secretary, about the 1,600 laws. Several years ago I invited the Department of Defense to come over with a few programs that we could pilot project by waiving all the laws except a few essential questions like discriminations, et cetera. We went from there to milestone authorizations and invited the Department of Defense to come over with milestone programs so we could waive an awful lot of things and authorize certain stages. Rather than 1 year-by-year, authorize for 2 or 3 years. The Department came over with two or three programs then, and that has been a standing invitation, but the Department of Defense is no longer asking for milestone authorizations. I understand one of the reasons is that they want more flexibility—not to be committed to a spending kind of pattern on one program—where they can shift back and forth.

So I would renew my invitation in response to what I think is a very legitimate point about the number of laws and rules and regulations. I think we ought to waive a lot of these things. We ought to do it on some pilot projects and see which programs have enough stability in them so that we can say look, we waive these things for these programs. I think there is a lot of room to do that.

At one point in my life a long time ago I had to sit down and read not only the laws relating to procurement, but all the regulations, all the armed services procurement manuals. I do not ever want to go through that again. That was right after I was out of law school. That was a job I had to do and it is awesome. It would fill up this whole table. I do not see how anybody can ever get through it in less than probably a year's reading.

So we have gotten ourselves into this bogged-down process and every time there is a new problem there is a whole new set of laws and a new set of regulations, and the cumulative total is the problem.

Perhaps you could take a look at why the Department no longer seems to favor that milestone approach and also I would invite you to take a look at whether or not there are two or three programs that are stable enough so that we could move in that direction and do some waivers here, because I certainly, for one, would be very receptive to that.

Senator Levin.

Senator **Levin**. Just a couple additional questions. Thank you, Mr. Chairman.

LANCE MODERNIZATION

There has been some discussion, Mr. Secretary, about the Lance modernization and the conventional arms reductions negotiations in Europe, and I would like to ask you this question. I think Admiral Crowe has already responded to it in general. Do you think that the following approach is worthy of consideration, where we would link negotiations on conventional arms reductions with negotiations on short-range missiles while also keeping alive the Lance modernization option? I think trying to summarize that three-track approach that the chairman talked about, do you believe that basically that is an approach which is at least worthy of our consideration?

Secretary **Cheney**. Let me see if I can walk through it carefully.

Chairman **Nunn**. Let me just make clear what I said was the Germans ought to commit to modernization.

Senator **Levin**. Let me modify it, then. There should be a commitment to modernization rather than delay the decision with the other two tracks, which would be linking negotiations on conventional arms reductions to negotiations on reductions in short-range missiles.

Chairman **Nunn**. And making it clear that we are not going to go to zero.

Senator **Levin**. Is that a worthy possibility? At least is it worth consideration?

Secretary **Cheney**. It is certainly worth consideration, Senator. Let us be careful, though, here in terms of how far we go. We are in the midst of some delicate intra-alliance negotiations and I do not want to make pronouncements here today that are going to expand or limit various and sundry options. Our position at present is that we need modernization, that we would like to have a commitment from the Germans on modernization. Second, that our number one arms control priority is conventional force reductions in Europe.

Now after we get through Phase 1 and get conventional force reductions behind us, then I think you can come back and take another look at negotiating on short-range forces. But, as the chairman points out, one of the few things that I have found everybody agrees to, at least at this stage, is the notion that we want to avoid a third zero and that whatever we do has to recognize that for the foreseeable future nuclear weapons are going to be an important part of our posture in Western Europe, and that any arms control effort in this area should wait until after we have dealt with the convention imbalances that currently exist.

Senator **Levin**. So you do not exclude, then, negotiations toward reductions at this point? I am just talking about the current position. It does not exclude that. It just sequentially puts it after an agreement on conventional reduction?

Secretary **Cheney**. Yes. I am constrained, Senator, to come back and reiterate what our current posture is. I am not the Secretary of State. I do not want to create problems in that area. We feel very strongly about the current posture of modernization; go forward with development of the follow-on-to-Lance; take the specific commitments and decisions on modernization, the deployment of the follow-on system down the road—we do not need those today—and continue to pursue as our number one arms control priority the conventional force reductions; and then look at some of the other options that you have discussed. But we really think the priority which comes first, especially where arms control is concerned, is to deal with the conventional force imbalance that is still overwhelming, even after the Soviet unilateral announcements.

Senator LEVIN. Do I have time for one more question?

Chairman NUNN. I have told the Secretary we will let him leave somewhere around 12:30. He has another engagement this afternoon. But if he can wait we certainly would entertain it.

SDI

Senator LEVIN. Admiral, do you personally believe that we should decide at this time to deploy SDI down the road if we find that it is technologically possible to do so, and make that deployment commitment now?

Admiral CROWE. It seems to me you have to answer more questions than just whether or not it is technologically possible, Senator.

Senator LEVIN. Before we make that commitment?

Admiral CROWE. In my view, yes. You have to see if you can weaponize the system, if it is cost-effective. There are a number of questions that have to be answered.

Senator LEVIN. Countermeasures, too?

Admiral CROWE. Yes.

Senator LEVIN. Do you agree with that, Mr. Secretary?

Secretary CHENEY. I do not disagree with anything the Admiral said.

Senator LEVIN. That goes for the whole morning or just that question?

Senator WARNER. He wants 15 carriers, though.

Secretary CHENEY. Right. Well, one caveat, John, one caveat. [Laughter.]

Senator LEVIN. Thank you very much.

Chairman NUNN. Mr. Secretary and Admiral Crowe, we appreciate very much your being here. We are not going to have a closed session today. There are obviously a lot of questions we need to cover in closed session, but time does not permit that.

The only other question I would have is, do you have a time frame for this strategy review now? I am not pushing. I would rather have a quality product and get it later than have a rushed product that was inferior. I just ask you that for information.

Secretary CHENEY. On a tentative basis—and I would want to check with General Scrowcroft, who is really in charge of the overall process—we should have all of that completed by the end of this month.

Chairman NUNN. Thank you very much, Mr. Secretary, Admiral.

Secretary CHENEY. Thank you.

Admiral **Crowe**. Thank you.

[Questions for the record with answers supplied follow:]

Questions Submitted by Senator Sam Nunn

MX/MIDGETMAN DECISION

Senator **Nunn**. Secretary Cheney, what midgetman development activities can be funded with $100 million? For example, does this level allow for any work on the basing mode or flight testing of the missile?

Secretary **Cheney**. The proposed funding profile for Small ICBM in the Amended President's Budget will provide only an identifiable Small ICBM effort within the FYDP. With the reprogramming of $100 million for fiscal year 1989, the proposed funding in fiscal year 1990 through fiscal year 1994, and additional funds in fiscal year 1995, the effort could eventually lead to a certified missile (10 test flights), exclusive of any basing effort. Further, the fiscal year 1990 funding of $100 million will severely constrain the full scale development contract team, leaving only a caretaker force at contractor plants. Major efforts in fiscal year 1990 would focus on continued recertification/qualification of the missile subcontractor/vendor base and continued design activities and tests leading toward the missile critical design review (CDR) in fiscal year 1993. Approximately $0.95 billion would need to be added across the FYDP to lead toward an IOC for the program.

Senator **Nunn**. You indicated last week that you have not decided whether to base the Midgetman at Minuteman ICBM sites on the northern plains or on large tracts of U.S. Government land in the southwest. You also could not say how many Midgetmen would be deployed, other than that it would be between 250 and 500. What is your timetable for making these decisions?

Secretary **Cheney**. The final decision on basing does not need to be made now to support funding initiatives in the fiscal years 1990–91 Defense budget. Since funding for construction of base facilities is a determining factor in the decision timetable, the basing decision should be made about three and one half years in advance of the SICBM's projected initial operational capability date (IOC) now estimated to be later on in the 1990s. Since the number of missiles deployed will affect basing requirements, I would anticipate that we would make a decision on the overall missile buy at the same time as the basing decision.

OUTLAY CEILING

Senator **Nunn**. The Congressional Budget Office estimates that this budget amendment will meet the budget authority target of $305.5 billion from the Bipartisan Budget Agreement, but will exceed the Agreement's outlay target of $299.2 billion by $3.8 billion. If we have to abide by CBO outlay estimates as we have in the past, do you have any suggestions for how Congress can bring the Department's fiscal year 1990 budget in line with the outlay target of the Bipartisan Budget Agreement? Can you suggest any measures or steps, such as recisions of prior year funds, that would reduce fiscal year 1990 outlays?

Secretary **Cheney**. Given the difficulty of making accurate predictions of precisely when expenditures will occur, the 1.3 percent difference in the two independently developed estimates by the Administration and CBO would normally not be cause for concern. However, the procedures under which the Congress operates in considering appropriations could cause the outlay issue to result in substantial adjustments to the fiscal year 1990 Defense program. It would be most unfortunate if adjustments were made which neither the Congress nor DOD would support on their merits in the absence of the outlay problem, particularly if, as we believe, CBO's estimates turn out to be understated. My staff has been working with the CBO staff to identify the major differences in our estimates and to determine the reasons for the differences. We have identified over $3 billion of methodology differences which we believe cause CBO's total estimate to be overstated. Although we recognize that our method of estimating will not produce precisely correct projections in each account, we are convinced that our methods are sound and our estimates are no less reliable than CBO's. I am concerned that decisions may be made during the authorization and appropriation process which will be disruptive to the Defense programs without really contributing to the deficit reduction goal. I hope the Congress will recognize the limitations that exist in accurately forecasting outlays to avoid potentially damaging changes to the Defense programs.

5-YEAR DEFENSE PROGRAM

Senator NUNN. The 5-Year Defense Program submitted to Congress in January contains both positive and negative "funding wedges" in the outyears called "program estimates." According to Deputy Secretary Taft, the negative funding wedges reflect the assumption that "some requirements we now anticipate will not emerge" and that therefore today's outyear program can be executed for less money when it becomes a budget year. Do you plan to use similar funding wedges when you revise the FYDP? Wouldn't it make more sense not to count on future savings so that if they do materialize, you can use the money to make the production rates on existing programs more efficient?

Secretary CHENEY. The decision to include funding wedges for "unanticipated requirements" and "program estimates" in the FYDP was made by the outgoing Deputy Secretary of Defense. He concluded, after five years' experience reviewing defense programs and preparing defense budgets, that it would be reasonable to adopt year-by-year planning targets slightly above the toplines we expect to present to the Congress. The larger program is offset with a negative "funding wedge" amounting to about 2 percent of the total defense program in each year. The 2 percent figure—which translates into −$21.7 billion over the fiscal years 1992–94 period—reflects the product of two separate considerations. First, about 4 percent per year of the dollar value of our outyear defense program either need not or cannot be budgeted. As time passes and outyears come closer to being budget years, some programs are cancelled or funding is reduced for them. Because we cannot predict in advance what those programs will be, Mr. Taft included a proxy for their aggregate value in the negative "program estimates" funding wedge (−$45 billion in fiscal years 1992–94). Second, we cannot predict in advance certain requirements that might emerge in the future. Based on recent experience, these have totaled about 2 percent of the dollar value of the outyear program. The second, positive funding wedge for "unanticipated requirements" (+$23.3 billion in fiscal years 1992–94) was included to allow for such occurrences.

I believe this approach has some merit. The FYDP, therefore, will for now include both "funding wedges." If future developments dictate that another approach might be more useful, or that the funding amounts should be changed, I will make the appropriate adjustments at that time.

In answer to the second part of your question, my approach is to attempt to program and budget at efficient production rates for all systems. Savings that might materialize from reductions in requirements for some programs should not be needed to improve production efficiency, but they could be used to increase production quantities in cases where requirements have increased.

MANAGEMENT SAVINGS

Senator NUNN. In your statement you anticipate that further personnel reductions saving $286 million in fiscal year 1990 and $434 million in fiscal year 1991 will be made to implement recommendations resulting from the Defense Management Review now in progress. How were these savings calculated? Do you anticipate consolidation or elimination of agencies or activities within the Department to achieve these savings?

Secretary CHENEY. These savings are very rough estimates of reductions that will be made upon completion and approval of the Defense Management Review. This Review is a follow-on to the Packard Commission Report and will be submitted to the President for approval prior to implementation. The specifics on the improvements to be implemented will not be available until approval of the President is received.

2-YEAR BUDGETING

Senator NUNN. The Bipartisan Budget Agreement covered only fiscal year 1990 and did not address the second year of the biennial budget. The overall level for National Defense in the Administration's budget for fiscal year 1991 is likely to be $4–8 billion above the figure for fiscal year 1991 in the budget resolution. Do you have any suggestions on how we should proceed to enact a 2-year defense budget when there is no overall budget agreement for fiscal year 1991 between Congress and the Administration?

Secretary CHENEY. The House and Senate have now reached a Conference agreement on a budget resolution for National Defense for fiscal years 1990–92. The level for fiscal year 1991 budget authority is only $2.0 billion below the Bush amended budget. The outlay level in the resolution is actually $2.3 billion higher than the estimate in the amended budget. Since outlays are important because of G–R–H considerations, I don't see any reason why the Congress could not enact a 2-year budget for defense. In the final analysis, there is nothing about biennial budgeting that prohibits a budget amendment if circumstances develop that require an amendment.

EFFECT OF CARRIER FORCE REDUCTIONS ON COMMITMENTS

Senator NUNN. Do you anticipate any reductions in or current carrier deployments as a result of your decision to retire the *Coral Sea?*

Secretary CHENEY. The recent decision to accelerate retirement of *U.S.S. Coral Sea* will require that our overseas carrier commitments be adjusted. As a first step, reduction in naval presence will occur in the Indian Ocean/Persian Gulf. This fiscally mandated reduction is acceptable given the improved security conditions now evident throughout the region. Further opportunities to seek flexibility in meeting our carrier deployment commitments will be sought.

COOPERATIVE R&D

Senator NUNN. The Reagan budget request included only $100 million for new cooperative research projects with our allies in fiscal years 1990 and 1991. President Bush's amended request reduces that level even further by $3 million in fiscal year 1990 and by $4.5 million in fiscal year 1991. This lower level of funding follows several years in which Congress has fairly consistently authorized about $200 million and appropriated about $150 million for this program. From the outset of this initiative, I have been concerned that its funding should be stable and predictable in order to convince our military Services and our allies that we are serious about the need for armaments cooperation. Does this budget request indicate that the Defense Department is less committed to cooperative development than in the past? In light of the controversy over the FS–X aircraft, what are your views on the prospects for armaments cooperation with countries that are both defense allies and economic competitors?

Secretary CHENEY. The Department of Defense remains fully committed to the armaments cooperation as a means to cost-effectively develop and field conventional systems. The reductions taken in the NATO Cooperative R&D Program in the amended budget request were proportional reductions that were absorbed evenly by a number of R&D programs. The original submission of approximately $100M/year for fiscal year 1990, however, does continue the undesirable trend of year-to-year variability in budgets for this program. This variability in the outcome of programming and budgeting cycles has been occurring in spite of the existing policy guidance for a stable or growing funding level with $200M/year as a baseline. The Defense Resources Board will soon conduct an "Implementation Review" on our Armaments Cooperation Process. The results of this effort should identify areas for improvement in the Planning, Programming, and Budgeting System to give optimal consideration for armaments cooperation, and to ensure that the program is strongly supported, both in policy guidance and project formulation.

The turmoil which arose around the FSX is unfortunate as it distracted attention from just this point. It is with just those allies who are technologically advanced enough to be competitive in the marketplace that the *greatest* payoffs from cooperation are likely to accrue: First, these are the partners who can bring their own advanced technologies as contributions to a cooperative program; second, they have the economic resources to sustain the role of an equitable partner in a high-technology, high payoff development program; third, they are most likely to have the industrial capability to translate the result of a cooperative development into the hardware for improved common defense. we carefully considered all proposals for defense cooperation with other nations, carefully weighing the advantages and disadvantages to the United States. The potential impact of each program on the defense industrial base is carefully considered both in the Department of Defense and in consultation with the Department of Commerce. Where necessary, safeguards are incorporated to ensure that all such ventures are in the interest of the United States. The reality of today's marketplace is that there are increasing numbers of nations who are both U.S. allies and commercial competitors. This is symbolic of the success of free economic systems, and shows the collective vigor which is the basis for a strong common defense.

ASAT ARMS CONTROL CONSIDERATIONS

Senator NUNN. The fiscal year 1985 Authorization Act required the administration to examine the prospects for a mutual and verifiable ban on anti-satellite weapons. The administration's response to that requirement was a declaration that no verifiable ASAT ban could be devised, given the limitations on National Technical Means of verification. However, since the INF Treaty and the CDE, the horizons for potential verification activities have broadened well beyond the mere use of "National Technical Means." Can you now envision a verification regime that would allow us to determine with high confidence that the Soviets are complying with a ban on ground-launched, kinetic kill ASATs like the Soviet co-orbital system or some of our proposed ASATs? In your judgment, would such a ban on ground-launched kinetic kill ASATs, if verifiable, be in our national interests?

Secretary CHENEY. The need for effective verification applies as much to space arms control as it does to other arms control efforts. In fact, this problem is aggravated for ASAT systems because the satellites which serve U.S. and Allied security are few in number. Cheating of ASAT limitations, even on a small scale, could pose a disproportionate risk to the United States. While the difficult verification problems associated with ASAT arms control might be decreased with the establishment of intrusive measures, in some instances these measures would cause other problems. Negotiated measures with the objective of enhancing verification of an ASAT arms control agreement might require access to U.S. space systems that were alleged by the Soviets to have ASAT capabilities, and hence create an unacceptable risk of compromising the protection of valuable national security information.

On the general issue of ASAT arms control, the administration is currently reviewing all aspects of our national security, including a variety of arms control considerations. Any comments on the details of that review would be premature at this time.

REMOVAL OF CHEMICAL WEAPONS FROM FRG

Senator NUNN. In his April 27 statement in Bonn, Chancellor Kohl said that President Bush has agreed that all U.S. chemical weapons would be removed from Germany by the end of next year, instead of [deleted] as originally planned by the Reagan administration. To which site or sites will these chemical stockpiles be relocated and how will they be transported?

Secretary CHENEY. The administration is committed, as Secretary Baker said in his March 6 address at the opening of the CFE talks in Vienna, to explore acceleration of the retrograde of U.S. chemical warfare munitions from the FRG. We are studying options for relocation of the chemical stockpiles from Germany. Johnston Atoll looks most likely, pending completion of an environmental study and documentation. Transportation will be by a combination of [deleted]. Details of timing and transportation are being worked out.

Senator NUNN. What effort, if any, is the administration making to try to persuade West Germany or any other of our European allies to accept the peacetime deployment of new binary chemical weapons on their soil once the existing unitary weapons are withdrawn? If we are not engaged in such discussions, why was the administration eager to accelerate the removing of our existing chemcial deterrent from NATO?

Secretary CHENEY. There are no efforts underway to persuade any European ally to accept peacetime deployment of binary chemcial munitions. The response to negotiations which resulted in the agreement of the 1986 NATO Force Goal calling for United States CW modernization indicated such efforts would be futile and counterproductive at the current state of perceived threat. The Defense Department did not initiate the acceleration of the removal of our unitary chemcial weapon stocks from Europe.

C^3I INTEGRATION

Senator NUNN. Last year Congress directed the Department of Defense to serve as lead agency for the detection and monitoring of air and sea traffic involved in drug smuggling. Congress also directed the Department to take the lead in establishing a command, control, and communications network to aid in the drug interdiction effort. What specific steps has the Department taken to date to implement these responsibilities? What tasks remain to be done?

Secretary CHENEY. DOD has completed the plan to develop a communications network to support drug interdiction and associated technical intelligence. Plan specifics, to include funding and responsibilities, are contained in the DOD May 1989 report to the Congress, which is pending Secretary of Defense approval.

ASAT

Senator NUNN. Admiral Crowe, may we have your best military judgment on whether a ban on ground/launced, kinetic-kill ASAT's would be in the U.S. national interest, given our dependence on space assets?

Admiral CROWE. [Deleted.] The issue of anti-satellite limitations is currently being evaluated as part of the President's National Security Review.

CHEMICAL WEAPONS

Senator NUNN. Admiral Crowe, how confident are you that the United States could deploy adequate stockpiles of binary weapons to Europe in a crisis?

Admiral CROWE. I am confident sufficient amounts of the planned binary chemical stockpile can be moved to Europe for use in retaliation. [Deleted.]

NAVY OPTEMPO/PERSTEMPO

Senator NUNN. Admiral Crowe, in your view, will the Navy be able to meet its carrier deployment commitments without adversely affecting retention?

Admiral CROWE. In reaching the decision on retiring the U.S.S. *Coral Sea* early, Secretary Cheney reaffirmed the necessity to maintain OPTEMPO/PERSTEMPO goals. To do this will require that national commitments be reviewed and forces adjusted to meet these goals. Experience has shown that unless these goals are met personnel retention will ultimately be adversely affected.

QUESTION SUBMITTED BY SENATOR CARL LEVIN

PERESTROIKA

Senator LEVIN. Secretary Cheney, you have been quoted as predicting that Soviet leader Mikhail Gorbachev would fail in his efforts at political and economic overhauls and be replaced by a more traditional, anti-western leader. Given your personal opinion on this matter, do you believe that it is in the interest of the United States that Gorbachev succeed in his program of Perestroika?

Secretary CHENEY. We hope Perestroika succeeds. We think that would be in the best interests of the United States and of the world. Political reforms that bring a measure of freedom and democracy and economic reforms toward a free market-oriented system could result in changes in the nature of the Soviet system that could enhance the cause of peace. To the extent Gorbachev's reforms help bring about a more open, stable and secure Soviet Union that increasingly casts its values and priorities in terms of the quality of life for its people rather than expansion abroad and in which there are internal political constraints on the power of the Soviet leadership and party, we strongly support them.

The jury is still out, however, as to the eventual outcome of Gorbachev's reforms. His efforts to redress the failed Soviet economic system have not yet been successful. Virtually all of Gorbachev's new policies could be reversed, and their meaningfulness is dependent on how—or if—they are carried out by a sometimes skeptical and resistant bureaucracy. It is essential, therefore, that the United States base its defense policies on its strategic needs rather than on our hopes about Gorbachev's good intentions and his ability to carry them out.

QUESTIONS SUBMITTED BY SENATOR ALAN J. DIXON

NAVAL AVIATION

Senator DIXON. Secretary Cheney, last week before the House Armed Services Committee you stated that the decision on cutting programs was not an easy one and that if budget realities were different you would not be in favor of many of the cuts. I am particularly concerned over the effect of the proposed budget cuts on naval aviation. It seems that the proposed budget leaves the Navy with some very serious shortages of carrier-based aircraft. This budget seems to place a higher priority on improving our strategic posture rather than strengthening our tactical forces. With the softening of the Soviet position, doesn't it make sense to improve our tactical forces where we are not near parity? Our carriers seem to be used, almost exclusively, during periods of conflict. Why were they the apparent target of the budgeteers?

Secretary Cheney. Carriers are one of our capital investments whose dollar value invites budgeteers to carefully scrutinize their cost, contribution to national security and overall value to the United States in view of current fiscal constraints.

Senator Dixon. In prepared testimony before the House Armed Services Committee last week, Admiral Crowe stated that the ATA and ATF will be delayed ". . . slower than previously planned. . ." Are you concerned that a delay in the ATA would cause a serious shortfall in attack aircraft, and if the ATA is seriously delayed would you consider recommending continued procurement of the A-6 aircraft?

Secretary Cheney. [Deleted.] The development of the A-12 is fully funded and is on schedule, on track, and on time. [Deleted.] This was necessary due to budget constraints; there was nothing in the A-12 development program that caused the procurement reduction.

Senator Dixon. Competition is clearly essential if we are to get the most for our defense dollars. Are you concerned that the cancellation of the A-6E, The EA-6B, and the F-14 may put Grumman out of the naval air business? What effect would that likely have with respect to competition? Are you prepared to live with only one experienced producer of carrier suitable aircraft?

Secretary Cheney. Naturally we are concerned for the well-being of the Grumman Corporation. They have been building quality naval aircraft for more than fifty years. The aircraft procurement strategy reflected in President Bush's adjusted budget, however, is a sound one. It responds to warfighting requirements in a fiscally responsible manner. If Grumman should decide to withdraw from the military aircraft business they would take with them a lot of experience in building carrier airplanes. In the near term that would leave only McDonnell Douglas with the requisite background. Lockheed, of course has some experience and General Dynamics will quickly come up to speed because of their participation in the A-12 program. The impact of a Grumman withdrawal will be lessened by their current lack of participation in any future program. I would prefer to have Grumman remain in the carrier aircraft business. Absent that opportunity, however, I feel confident in the long term capabilities of those firms that will produce carrier aircraft.

Senator Dixon. If Congress were to add funding for naval aircraft procurement, what aircraft would be the highest priority in your view?

Secretary Cheney. The EA-6B. This is an aircraft that is critical to the survival of our forces should they go into combat. We are short of these aircraft today and our inventory will continue to dwindle until a replacement aircraft is identified and procured.

F-15E

Senator Dixon. Canceling the dual mission capable F-15E aircraft seems to be premature considering its mission would be assumed by the unproven and yet to be built Advanced Tactical Fighter and Advanced Tactical Aircraft now under development. Shouldn't we continue to build the F-15E until we have proven an affordable advanced aircraft?

Secretary Cheney. The CINC's have rated fielding of the F-15E very high on their integrated priority lists. The Air Force has taken these requirements into consideration in developing the F-15E program. The decision to terminate production in fiscal year 1991 was made solely for budgetary reasons. Assuming that the Advanced Tactical Aircraft enters production on-schedule, the conventional long-range interdiction mission can be accomplished, albeit at increased risk.

NATO INFRASTRUCTURE FUNDS

Senator Dixon. NATO Infrastructure funds, to which the United States contributes 28 percent, will pay for the U.S. 401st fighter wing move from Spain to Italy. What will our actual dollar amount be and doesn't our contribution for this move violate legislation that no United States funds are to be spent to relocate the wing in NATO?

Secretary Cheney. The total cost to NATO for relocating the 401st Tactical Fighter Wing to Crotone is estimated at $827M and the U.S. share (28%) is $231M. Additional US costs for beddown of the 401st TFW at Crotone include the following projects which members of Congress approved before we committed to NATO:

US Share of Bilateral Air-to-Ground Range	$7.0
Recreational Facilities	14.3

Non-Appropriated Money for MWR	4.8
Total	26.1

No. Public Law 100-393, August 14, 1988, Section 123 states, "None of the funds appropriated in this Act, except for North Atlantic Treaty Organization Infrastructure funds, may be used for planning, design, or construction of military facilities or family housing to support the relocation of the 401st Tactical Fighter Wing from Spain to another country."

GORBACHEV'S TROOP REMOVAL INITIATIVES

Senator DIXON. While responding cautiously to Gorbachev's unilateral initiatives to remove troops in eastern Europe, can we take unilateral actions that will reduce our strength only marginally while leaving in place a strong deterrent force? Can we do this, for example, by slightly reducing our tactical air capability in Europe?

Secretary CHENEY. No. Even if all of Gorbachev's unilateral reductions are implemental in full, NATO will still find itself outnumbered 2:1 in key weapon categories.

ALLIED DEFENSE BUDGETS

Senator DIXON. At the upcoming NATO conference, will you be making a major effort to convince our NATO allies to actually—and to not just promise—to increase their defense spending according to goals previously committed to, and what are your chances of being successful?

Secretary CHENEY. Achieving significant increases in allied defense budgets will, in the near/medium-term, continue to be a difficult task and, in some cases, an unlikely prospect. Nevertheless, we will continue to pursue needed increases as we seek to examine other means to use available resources more efficiently and effectively. These means include improved division of labor, enhanced reserve and mobilization potential, and expansion of common-funded programs.

AMENDED DEFENSE AUTHORIZATION REQUEST 1990-91

Senator DIXON. This Committee recently heard from the Commander of U.S. Forces Korea. From his testimony it seems our presence in Korea is considered to be indefinite. Why haven't we strongly encouraged the South Koreans to expand their force to asssume the role of U.S. forces on the peninsula? I don't believe U.S. presence equals deterrence in this case and our defense dollars have already permitted the Koreans to build a strong economy that can support an effective military force.

Secretary CHENEY. The requirement for U.S. troops in South Korea remains because of the continued and qualitatively improving threat from North Korea. Korea is the tinderbox of Asia and the likelihood of conflict is higher there than perhaps anywhere in the Pacific. Technically, a state of war still exists on the peninsula with the current uneasy peace the result of an armistice agreement between the armed forces of North Korea and the United Nations Command (UNC) rather than a peace treaty between North and South. Two of the largest armies in the world are maintained in a wartime posture and face each other across the Demilitarized Zone (DMZ). North Korea has long sought unilateral reductions in U.S. forces as a primary foreign policy objective. Linking U.S. force adjustments with meaningful tension reduction measures by the North would place responsibility for alleviating the current confrontational situation on Pyongyang where it belongs. Until such North Korean measures are undertaken, the aggressive nature of the North Korean regime, the extreme forward deployment of its forces, and the proximity of Seoul to the DMZ require that a strong combined deterrent be maintained.

Any adjustments in U.S. forces strength must not be set at an arbitary numerical level but rather must be made on a planned and detailed basis. Either the Republic of Korea (ROK) armed forces must assume some of the roles and missions currently performed by U.S. forces or tensions have to be reduced between the North and South. It is possible for adjustments to be made but stability and deterrence must be maintained. There is a point below which a reduced U.S. force presence will no longer provide a deterrent effect and will call into question the strength of the U.S. commitment to South Korea's defense. The exact level of tolerable reduction will have to be addessed by appropriate military commanders and the JCS.

NAVY REDUCTION IMPACT

Senator DIXON. Admiral Crowe, what is the impact of transferring, deactivating ships and aircraft, cutting procurement, and other actions incorporated in the amended defense budget? How do these actions reduce the Navy's ability to perform its mission, i.e., can the Navy adequately respond to a Persian Gulf crisis and can the ships be quickly returned to active service if needed?

Admiral **CROWE**. These changes in force structure, coupled with the requirement to achieve OPTEMPO-PERSTEMPO goals, will necessitate reviewing our commitments as well as assigning fewer ships to the existing battle groups, amphibious and underway replenishment groups. The reduction in surface combatants impacts their availability for missions such as the Middle East Force, UNITAS, and drug interdiction operations. Because of these reductions or capabilities to respond rapidly in some crisis situations will be diminished.

Generally speaking, once a unit is removed from the existing force structure, returning it to active service is neither quick nor cost effective.

TACIT RAINBOW

Senator **DIXON**. Since under this amended budget the Navy will withdraw from the Tactic Rainbow Destroying Missile Program, what missile will be used in this role and will it be modified to incorporate at least some of the capabilities that Tacit Rainbow will have? If so, what are the modification costs?

Admiral **CROWE**. This matter is currently under study by Joint Requirements and Oversight Council. A report will be forwarded to the Secretary of Defense about the middle of June.

U.S.S. "ENTERPRISE" OVERHAUL

Senator **DIXON**. Since foregoing overhaul of the carrier *Enterprise* would have saved $1 billion according to the Congressional Budget Office, why wasn't this option considered?

Admiral **CROWE**. This option was under strong consideration as a reduction but was not adopted due to the additional warfighting and operational capabilities that the overhaul of *Enterprise* would provide into possibly the second decade of the 21st century. Although costly in the short term, the investment in modernization of *Enterprise* clearly provides the best combat capability for the money.

V-22 OSPREY

Senator **DIXON**. Admiral Crowe, the Osprey, according to Special Forces Commander General Lindsay in testimony before this Committee, would give our forces an agility we do not have and it would have made our Iranian rescue task much easier. Considering this significant increase in capability, the enormous commercial applications of this helicopter, plus the aging and less capable CH-46 helicopter now being used, how can we cancel this program?

Admiral **CROWE**. The V-22 has been developed with the intent of putting the assault echelon ashore. It provides more than double the range and speed of our current capability, and this allows the ships to stand off over the horizon, thereby enhancing their own survivability, as well as that of the assault echelon. The V-22 would also play a role in low intensity conflict and anti-terrorism, and it would have considerable commercial application, as you point out. The aircraft would provide an upgraded capability, and we would very much like to have it, if our fiscal resources allowed. In that regard, the other Service Chiefs and I support Secretary Cheney's decision to cancel the program due to fiscal considerations.

QUESTIONS SUBMITTED BY SENATOR JOHN GLENN

PAY RAISE

Senator **GLENN**. Senator Cheney, I note that yesterday in the Washington Post (see attachment) Mike Causey reported that, and I quote, "The Bush administration has reached a tentative agreement with Congress to allow a 4-percent Federal raise next January, and a full cost-of-living adjustment for Government and military retirees." In your testimony, however, you indicate the budget requests a 3.6 percent pay raise for military personnel in fiscal year 1990 and 2 percent for the civilian work force in fiscal year 1990. Can you clarify the status of the recommended DOD pay raise for fiscal year 1990?

Secretary **CHENEY**. The fiscal year 1990 budget requests a 3.6 percent pay raise for military personnel and a 2-percent pay raise for civilian personnel. These estimates have not changed since the January submission, although the level provided for functions 050 in the bipartisan budget agreement is described as sufficient to permit a 3.6-percent pay raise for both military and civilian personnel.

[From the Washington Post, May 21, 1989]

Uneasy Truce on Raises

(By Mike Causey)

Senate debate starts today on a budget resolution that will eventually determine how much of a raise, if any, federal workers and retirees get in January and the status of the popular lump-sum pension benefit.

Compared to this time last year, things look good for the 5 million federal employees and retirees. But this time of budget good feeling and compromise could collapse oversight.

The Bush administration has reached tentative agreement with Congress to allow a 4 percent federal pay raise next January, and a full cost-of-living adjustment for government and military retirees. Earlier, the president had proposed limiting civilian federal workers to a 2 percent raise and shipping the 1990 COLA for retirees.

The administration also has drafted a bill that would eliminate the lump-sum benefit for retirees as of July. But the bill hasn't been approved by the Office of Management and Budget and appears to be on hold. Senate and House negotiators apparently intend to keep the lump-sum option alive, and the administration has shown no serious objections.

Once the Senate and House agree on a budget resolution—which is really a blueprint for spending and revenue—they will have to reach agreement on a reconciliation bill that would implement legislative changes.

Friends of federal and postal workers plan to use the Senate budget debate to make it clear that Congress wants to keep the COLA for retirees, guarantee the civilian pay raise and keep the lump-sum benefit option at least until next year.

TOTAL FORCE POLICY

Senator **Glenn**. In 1973 this Nation initiated the total force policy whereby the active duty forces, and the Reserves and National Guard forces, as well as the supporting civilian establishments within the Department of Defense, all were integrated into one force to meet the national security needs of this country. One of the major effects of this policy was a substantial change in mission assignments to the Guard and Reserve, especially in combat support and combat service support functions.

Over the ensuing 15-plus years, there have been major changes in the national security needs of this country. Yet, to my best knowledge, we have never consciously and carefully reviewed our total force policy, this in spite of the fact that certain elements of our Reserve forces have disastrously low readiness and questionable combat capability.

I feel that a full fledged reassessment of our total force policy is long overdue, and should be initiated immediately. What are your feelings on this matter?

Secretary **Cheney**. There have been periodic reviews of DOD's total force posture. For example, in 1970 DOD Directive 1225.6 required that the Selected Reserve have the same priority for equipment as Active units with the same mobilization missions or deployment schedules. As a result of a later review, Secretary Weinberger in 1982 reiterated this policy of "first to fight, first to be equipped regardless of component". Periodic de facto reviews of our total force policy are accomplished through the PPBS process. Past reviews of total force policy may not have been as visible or comprehensive as one might wish, but they have occurred.

That is not to say that the Department cannot do much better. My staff has developed a draft total force policy directive. It is currently being revised based on Department comments and will soon be briefed to senior OSD leadership. This directive will clarify policy, assign responsibilities, standardize definitions, and support the development of uniform and consistent evaluation criteria and tools. The Rand Corporation and the Logistics Management Institute are assisting the Department in the development of tools for improving total force mix decisions. Also under consideration are a variety of institutional arrangements to provide for a regularly recurring review of our total force posture.

The answer to your question is: yes, we need a full fledged reassessment of our total force policy. Such an assessment had begun before I assumed office. I will see that it is completed.

V-22

Senator GLENN. As you know, prior to the administration's submission of the amended defense budget, Senator Stevens and I, along with others, sponsored a Sense of the Senate Resolution expressing the Senate's strong support for the continued development of the V-22 tilt-rotor aircraft; the resolution passed the Senate without any objection from any member. Obviously, from this resolution and judging by the questions you were asked last week by members of the House Armed Services Committee, congressional support for the V-22 is strong and widespread. Military support appears to be just as strong for this joint service program. As the lead service, the Marine Corps and its Commandant General Gray, has consistently stated that the V-22 is its number one aviation program. Also General Lindsay of the U.S. Army, Commander of Special Operation Forces, testified before this committee 2 weeks ago that he has a priority need for the V-22. Given the clearly expressed broad-based need and support for this unique aircraft, and after assessing the program very carefully, I personally am convinced that the V-22 will provide unprecedented combat mission flexibility both for the Marine Corps and for the other services in a multitude of roles, as well as having the potential for major civilian applications of its tilt-rotor technology. I know that this committee would appreciate your rationale for terminating the V-22 program.

Secretary CHENEY. The V-22 is an attractive program. We would continue it if we had additional resources.

At current and projected levels, however, we cannot afford the V-22. Although the all-helicopter force now proposed is somewhat less capable, it is less costly and less risky: Twenty-year discounted costs show it to be several billion dollars cheaper than the V-22. During the 5-year defense planning period, fiscal year 1990-94, V-22 procurement costs (in then year dollars) would be nearly $10 billion compared with less than $3½ billion for the all-helicopter force. The major benefit of pursuing the program we have proposed is that we have been able to continue funding other programs that have application over a broader range of defense missions and to avoid even further manpower and force structure cuts.

Finally, our capability to conduct opposed amphibious operations has improved considerably in the recent past. Though V-22 speed and range allow this aircraft to operate in excess of 300 nm from the shoreline, the speed and range of the LCAC and other supporting aircraft are limiting factors in conducting amphibious assaults. The V-22 cost and operational effectiveness analysis provided to OSD by the Navy and Marine Corps as a basis for the December 1986 full scale development decision states, "The advantage of the JVX's (V-22's) extra speed is not completely exploited in the force-sizing scenario used to this analysis, both because the effect on transit times at a 50 to 90 nmi radius is not large relative to total cycle times, and because the need to carry large numbers of HMWWVS externally restricts the JVX's speed. In other situations in which distances are greater and no external cargo is lifted, the JVX speed advantage is better. Ultimately, the value of both speed and the ability to self-deploy are matters of judgment." In light of the marginal contribution of MV-22's speed, further enhancements in our amphibious capability must be considered in the context of other related systems and forces.

FORWARD DEPLOYED FORCES STRATEGIES

Senator GLENN. Last year this committee expressed serious concern over the combat readiness of Naval aviation. Our report language, which without objection, I would like to make part of the record (see attachment), concluded that: "there was a shortfall of naval combat aircraft; the average age of combat aircraft was increasing above acceptable levels; and there were drastic reductions to the Navy's aircraft modification accounts."

Our report further tasked DOD to report to Congress how it plans to correct these problems.

We have now received that report which generally supports the findings of this Committee even though the report uses fiscal constrained planning assumptions.

Given this background of what I assume to be mutual concern, I find it hard to understand why this amended budget does the following:

a. *Terminates the V-22 Osprey,* which we have already discussed.

b. *Terminates the new production of F-14Ds,* without a concomitant increase in the number of older F-14As to be remanufactured in fiscal years 1990 and 1991.

c. *Terminates the new production of EA-6Bs.* Although this action was originally proposed in the Reagan budget, the cancellation remains part of the amended budget.

d. *Reduces the number of the F/A-18 Strike Fighters* to be procured in fiscal years 1990 and 1991.

e. *Reduces the number of SH-60F antisubmarine warfare helicopters* to be procured in fiscal year 1990.

f. *Deactivates 73 P-3 antisubmarine aircraft.*

g. *Finally, though not an aircraft program, your budget proposes the termination of the Navy's Phoenix air-to-air missile program* after fiscal year 1991—the only long-range missile currently in full production. Combatant Commanders have already testified before this committee that inventories of smart weapons like the Phoenix remain critical.

I fully appreciate that you have had to make some tough choices in developing this budget. While doing so, however, you have stated your strong commitment to the strategy of forward deployed forces, of which the combat capability of naval aviation is a very significant element.

Given the action you are proposing in fiscal years 1990 and 1991, how do you assess the readiness of naval aviation?

Secretary CHENEY. Naval Aviation is, as it was during the Vietnam, Grenada and Libyan operations, ready to meet any threat across the spectrum of conflict. It is recognized that the actions proposed for fiscal years 1990 and 1991 are short of our optimal projected requirements, as they are in every budget submission. The proposed reductions and cancellations have not been made lightly, and it was my hope that they would not have to be made at all. However, in light of the worldwide political and fiscal environment and the anticipated threat, these well-measured actions are considered sufficient to procure the weapons and systems necessary for Naval Aviation to remain threat responsive without incurring an unacceptable risk to our Nation's defense. Additionally, my decision also involved a careful consideration of the need to balance overall defense programs within our limited resources. Should the environment change suddenly, these decisions, as well as many others, would certainly be revisited.

NAVAL AVIATION

The committee deliberated at some length the curent status of the Navy's aviation procurement account. At one point during the deliberations, the committee considered termination of the Air Force F-15E aircraft in order to transfer funds to offset shortfalls in the Navy's aviation account. This alternative was rejected because the committee believes that the F-15E is an essential element of United States conventional forces. This belief was reenforced by testimony of several of the Unified Commanders in Chief. Nevertheless, the committee is convinced that Navy aviation requirements require greater funding than is currently being provided in order to support the projected carrier battle group force structure.

Currently, the Navy is involved in operations in the Persian Gulf. In the past several years, naval aviation has been involved in operations to support United States policy throughout the world. The committee notes that nations which previously based United States aircraft are increasingly reluctant to grant United States aircraft landing rights. The committee is convinced that aircraft carriers and the associated air wings are in many cases the only option for overseas power projection and should be accorded high priority within the Department.

Last year, even as the overall budget was cut by $22 billion, the Congress increased funding for key Navy aviation programs, including the EA-6B, the AH-1W helicopter, and numerous programs in the Navy's aviation modification account. The committee held extensive hearings on the Navy's shortfall of combat aircraft and indicated three major concerns had arisen from these hearings: (1) there was a shortfall of Naval combat aircraft; (2) the average age of combat aircraft was increasing above acceptable levels; and (3) there were drastic reductions to the Navy's aircraft modification accounts. The committee is convinced that few of these problems were rectified in the amended fiscal year 1989 budget request. Further, the committee has learned of numerous troubling reports of further severe reductions in the Navy's aviation account in the fiscal year 1990 Five Year Defense Program.

The Congress again this year has found it necessary to increase funding on key Navy aviation programs. Specific changes are discussed elsewhere in this report. The committee has concluded that the Department is not requesting sufficient funds in order to modernize Navy aviation. This is inconsistent with the frequent requirement to call on Navy units to conduct operations, such as those ongoing in the Persian Gulf.

Therefore, the committee has included a provision (section 121) which requires the Secretary of Defense to report to the Congress by December 1, 1988, how the Department plans to alleviate aircraft shortfalls in the Navy, prevent further deterioration of the average age of Navy combat aircraft, and continue modification of Navy combat aircraft.

BRILLIANT PEBBLES

Senator **Glenn**. Media reports indicate that the Brilliant Pebbles system is all but ready to deploy. After a recent visit to DARPA, Los Alamos, and Sandia, it seems to me there is a lot more research to be done. Do you agree?

Secretary **Cheney**. Brilliant Pebbles is potentially a valuable contributor to a Strategic Defense System. I stress "potentially" because this concept is in a very early stage of research and development, and that it has not yet had the benefit of the detailed scrutiny given the other Phase I elements. There remain several operational and technical unknowns. To address these unknowns, the Department of Defense and specifically the Strategic Defense Initiative Organization are sponsoring several cost and feasibility study efforts later this year to determine the viability of the Brilliant Pebbles concept.

Recently, LTG Monahan requested that Brilliant Pebbles undergo an indepth evaluation by several independent groups such as the Defense Science Board and the JASONS. This review, to be completed in September, will focus on the technical concept and the issues that surround it. We expect to examine all the possible Soviet countermeasures to the concept through a standard Red Team/Blue Team process. The SDIO also hopes to get a better handle on the costs of Brilliant Pebbles, using new costing models. In addition, an Air Force team has been asked to look at the costing as well.

B-2

Senator **Glenn**. Your testimony indicates that the B-2 is experiencing delays in the flight test program while at the same time you are considering the B-2 for multi-year procurement. It seems to me the B-2 is not ready to proceed to low-rate production, much less a multi-year approval. What is the status of the B-2 development program?

Secretary **Cheney**. The B-2 development program is proceeding on track with the six full scale development (FSD) aircraft in various stages of assembly. In fact, the Air Force has formally accepted delivery of one of the full-size ground structural test airframes, which will undergo testing to certify the fatigue life of the aircraft. Regarding the FSD flight vehicles, the first B-2 is proceeding through the final stages of checkout at the Palmdale facility, preparing for first flight in late spring or early summer. In addition, flight testing of B-2 avionics is continuing aboard a C-135 flying test bed at Edwards AFB, CA.

SR-71

Senator **Glenn**. Are you convinced that termination of the SR-71 is in the best of interest national defense?

Secretary **Cheney**. Termination of the SR-71 program undeniably deletes a proved capability, however the program has simply become unaffordable in today's budget environment. The decision to terminate the program was made only after extensive study and discussion. Recent events in the reconnaissance arena have also given credence to this decision. We firmly believe the present Defense budget represents the best balance of priorities possible at this time.

STATUS OF BIGEYE DEVELOPMENT/PRODUCTION PROGRAM

Senator **Glenn**. What is the status of the Bigeye development/production program?

Secretary **Cheney**. The Bigeye program is on schedule and all indications are that it will continue that way, resulting in the start of the next phase of operational testing, OTIIC, in February 1990.

All three facilities (metal parts, fill/close and QL manufacturing) are on schedule and are being monitored to insure that the schedule is maintained. The metal parts facility at the Marquardt Co. in Van Nuys, CA is now undergoing checkout, and limited manufacture of parts has started.

Hardware deliveries to support the next phase of operational testing will begin in January 1990 and will be completed in June 1990. Prior to the delivery of the test hardware, extensive first article acceptance testing will be conducted.

We anticipate a full production contract award in fiscal year 1991, with other procurement contracts awarded in fiscal years 1992–1994.

SR–71

Senator GLENN. Admiral Crowe, are you convinced that termination of the SR–71 is in the best interests of national security?

Admiral CROWE. The SR–71 is an excellent aircraft with a useful reconnaisance capability that would be nice to retain. However, it is also an expensive program and, given the fiscal trade-offs with other similar systems, termination of the program was the best alternative.

V–22

Senator GLENN. Admiral Crowe, do you and/or the Joint Chiefs agree with Secretary Cheney's rationale for terminating the V–22 program?

Admiral CROWE. The V–22 has been developed with the intent of putting the assault echelon ashore. It provides more than double the range and speed of our current capability, and this allows the ships to stand off over the horizon, thereby enhancing their own survivability, as well as that of the assault echelon. The V–22 would also play a role in low intensity conflict and anti-terrorism, and it would have considerable commercial application, as you point out. The aircraft would provide an upgraded capability, and we would very much like to have it, if our fiscal resources allowed. In that regard, the other service Chiefs and I support Secretary Cheney's decision to cancel the program due to fiscal considerations.

NAVY OPTEMPO/PERSTEMPO

Senator GLENN. Admiral Crowe, as you know, I have been a strong supporter of a forward-deployed strategy and what I consider to be the cornerstone of the strategy—the forward deployment of carrier battle groups and Marine amphibious deployment of carrier battle groups and Marine amphibious ready groups. I am concerned, therefore, that the Administration is proposing to retire the U.S.S. *Coral Sea* early and remain at 14 deployable carriers vice 15.

As I recall, during the worldwide wargame you so graciously hosted in Pensacola last summer, we didn't have enough aircraft carriers to meet our wartime requirements. If we retire the *Coral Sea* early, can we continue to meet our forward-deployed peacetime commitments, and of equal importance, can we maintain the 18-month cycle between extended deployments for Navy and Marine personnel which I consider to be sacrosanct?

Admiral CROWE. In reaching the decision on retiring the U.S.S. *Coral Sea* early, Secretary Cheney reaffirmed the necessity to maintain OPTEMPO/PERSTEMPO goals. To do this will require that national commitments be reviewed and forces adjusted to meet these goals. Experience has shown that unless these goals are met personnel retention will ultimately be adversely affected.

QUESTIONS SUBMITTED BY SENATOR PETE WILSON

DETECTION AND MONITORING OF DRUG TRAFFICKING

Senator WILSON. Secretary Cheney, the Defense Department is now committed by law to an aggressive expansion of the military's role in drug interdiction operations. The Department added fiscal year 1990 funds for this activity only at the last minute, and a DOD report to Congress on the integration of C3I assets for the purpose of detecting airborne and seaborne narcotic smugglers is more than four months overdue. Clearly then, DOD needs to move more expeditiously on the implementation of this law. What have been among your first steps as Secretary of Defense to meet the Department's statutory requirment in this critical area?

Secretary CHENEY. The following steps have been taken: (a) December 8, 1989: Secretary of Defense issued Warning Order to the Commander-in-Chiefs (CINCs). Established organization to handle new detection and monitoring mission and assigned missions to CINCs. Requested proposed courses of action; (b) January 6, 1989: Secretary of Defense issued policy guidelines for implementation of new DOD mission contained in Act (Defense Guidance); (c) January 10, 1989: Secretary of Defense issued Alert Order to CINCs. Approved courses of action and directed operation's orders be developed for detection and monitoring; (d) February 3, 1989: Secretary of Defense issued Execute Order to CINCs to commence detection and monitoring. Authorized $10 million of operational and maintenance funds for start-up cost; (e) February 10, 1989: Joint Task Forces (JTFs) 4 and 5 Headquarters operational. Responsible for detection and monitoring. Created JTFs to conduct anti-drug surveillance operations. A Coast Guard Vice Admiral commands JTF 4 in Key West, Florida, and reports to Commander-in-Chief of Atlantic Forces. A Coast Guard Admiral commands JTF 5 in Alameda, California, and reports to Commander-in-Chief Pacific Forces. Both JTF 4 and 5 are operational 24-hours a day, 7 days a week, ready to provide target data and fused intelligence to the civilian law enforcement command nodes. In addition, both JTFs have and do conduct surveillance missions to assist the ongoing interdiction efforts; (f) February 15, 1989: DOD Report to Congress was submitted. Status of three mission areas: C3I communcations integration plan, National Guard support to states, and dedication and monitoring mission. Plan for use of $300 million provided; (g) March 30, 1989: Secretary of Defense approved 12 National Guard Plans. National Guard troops are already conducting surveillance and inspection operations to support the law enforcement agencies; (h) April 28, 1989: Secretary of Defense approved 36 additional National Guard Plans; (i) May 5, 1989: C3I Report to Congress completed. Pending Director, ONDCP coordination and Secretary of Defense approval and forwarding to President for submission to Congress; and (j) Decision reached on $300 million program review. Fiscal documentation commenced.

DOD SUPPORT TO LAW ENFORCEMENT AGENCIES

Senator WILSON. On February 15, the Defense Department submitted its first report to Congress on the status of military planning efforts to nhance the civilian law enforcement agencies in their drug interdiction program. Now this report, which the fiscal year 1989 Defense Authorization Act required by December, arrived over two months late and it largely discussed only a framework, for cooperation between DOD and other Federal agencies, identified several task forces and interagency working groups apparently developing drug interdiction programs, but made no references to concrete examples of monitoring or detection assets that the Department has used to supplement the Civilian authorities. In your opinion, what specific Service equipment. vessels, aircraft, and personnel could most effectively support DOD's drug interdiction mission?

Secretary CHENEY. DOD provides direct support to the civilian agencies on a daily basis. The U.S. Navy provides over 2,000 ship days a year in support of Coast Guard Caribbean maritime operations. To support these maritime interdiction operations, Navy P-3A and Air Force AWACS supplement Coast Guard air surveillance assets. Marine and Air Force units provide fixed-based radar coverage in Puerto Rico, Dominican Republic and Turks and Caicos Islands. The various state National Guards provide air surveillance, long-range reconnaissance and assistance in inspection of containers, vehicles, and cargoes at U.S. ports of entry. In the Bahamas the U.S. Army flies Blackhawk helicopters to support the in-country interdiction efforts of the Drug Enforcement Administration and Royal Bahamian Defense Force. In addition, DOD provides communications, intelligence and training support to the civilian law enforcement agencies. The civilian agencies have been pleased with the specific assets we have made available in support of their interdiction operations. DOD will continue to provide these types of assets and to continue to explore for additional innovative means to assist in the fight against drugs.

TECHNICAL SUPPORT OF LEA

Senator WILSON. This same report noted that DOD chaired an interagency working group which developed a so-called Master Plan for Drug Enforcement focusing on satellite communications and telecommunications efforts. A subsequent paragraph ambiguously described the Department's role in implementing this Plan as "fostering better coordination in the law enforcement effort by providing technical advice and resource support." Can you identify any examples of technical advice or resource support from DOD that have been applied to the fulfillment of this "Master Plan?"

Secretary CHENEY. The responsibility for implementing the Master Plan rests with the individual agencies involved in drug enforcement. To assist the agencies in the start-up process, DOD initiated, in fiscal year 1988, a $6.2 million program to procure and loan to relevant law enforcement agencies communications and COMSEC equipment which support interoperability and security in support of drug operations.

In fiscal year 1989, DOD technical assistance has been provided to the Communications Interoperability Working Group to formulate a baseline communications system for immediate implementation. Also, $60 million of the $300 million appropriated to DOD in fiscal year 1989 is planned to expand, modify, connect, protect, and secure relevant communications systems and subsystems. The specifics for fiscal year 1989 and fiscal year 1990 funding plans are outlined in the May C3I report to Congress, which is pending Secretry of Defense approval.

JOINT OPERATIONAL PLANNING SYSTEM

Senator WILSON. The February 15 report informed Congress that DOD had established a Joint Operational Planning System (JOPS) to meet the provision of the military/drug interdiction law making DOD the lead agency for the detection and monitoring of aerial and maritime transport of illegal drugs into the United States. The report claimed that "responsible commanders and support agencies have been identified, asssigned missions, and tasked to begin a phased interaction with Drug LEAs." Can you provide the committee with a background summary of DOD activity participating in JOPS and what assets they will use to help the civilian agencies?

Secretary CHENEY. The Joint Chiefs of Staff designated the Unified Commanders: Commmanders in Chief Atlantic, Pacific, and South and Specified Commander, North American Air Defense, as the commands responsible for the anti-drug detection and monitoring mission. On February 3, plans submitted by these commands were approved by Secretary of Defense for implementation. The two joint task forces (JTFs) were created to conduct and coordinate counternarcotics surveillance missions. The commanders have been assigned DOD assets to perform this mission only. Aircraft, ships, electronic signal and intelligence assets have all been provided to support the civilian agencies' interdiction operations. The JTF commanders hold regular planning conferences with the civilian agencies to coordinate all drug detection and interdiction operations.

SHIPBUILDING AND REPAIR INDUSTRY

Senator WILSON. Shipyard employment on the west coast has declined by 65 percent since 1982 and the State of California now has only one shipyard still active in the vessel construction business. In addition, of the 27 major shipyards identified by the Navy and the Maritime Administration 6 years ago as essential to a nationwide shipbuilding base, only 10 remain active bidders today. Finally, on March 1, 1988, the Under Secretary of the Navy stated that "the invigoration of our commercial maritime industry is more than a Navy problem or a private sector problem. It is a national problem which must be addressed in the context of a national defense and economic strategy." Can you outline some of the steps that you would have taken as Secretary to assist in formulating a plan to maintain a geographically balanced industrial base within the shipbuilding sector?

Secretary CHENEY. The location of a ship's construction yard makes little difference in the use of that ship by the Navy. Many of the ships in the Atlantic Fleet were constructed in shipyards on the west coast. Many ships in the Pacific Fleet were constructed in shipyards on the east and gulf coasts.

The "geographic balance" of the shipyard industrial base is of importance in ship repair. We believe that the steps we have been taking to overhaul and otherwise repair virtually all Navy ships on the coast from which they operate has maintained a geographically balanced ship repair industrial base.

PUBLIC SHIPYARDS

Senator WILSON. I have always supported the Navy's policy of retaining public shipyards in the United States to broaden the range of competition for overhaul and repair contracts as well as to ensure that DOD has an adequate maritime mobilization base during a time of crisis. Yet this policy is threatened by the fact that many public shipyards, such as Long Beach in California, may lose their skilled core workloads, and as a result, their future ability to compete for repair contracts. I would therefore appreciate your furnishing the committee with a report on the status of the public shipyards and those areas in which the yards can remain competitive bidders based on the Navy's near-term projection of its ship overhaul and maintenance requirements.

Secretary CHENEY. The Navy's eight public shipyards provide a variety of vital industrial and depot-level repair and modernization capabilities. Six of the shipyards, Portsmouth, Norfolk, and Charleston on the east coast; and Puget Sound, Mare Island, and Pearl Harbor on the West Coast, are engaged primarily in work on nuclear powered surface ships and submarines. The skills required to execute this complex work are carefully husbanded through a workload assignment process that keeps these public shipyards competitive and retains the required skills. Skill retention is further enhanced by the small number of private nuclear shipyards in this market and the geographic concentration of those competitors in the Northeast.

The two naval shipyards engaged in repair and modernization of conventionally powered Navy ships, Philadelphia and Long Beach, are in a more competitive market due to the nature of their work. Philadelphia, however, is the Aircraft Carrier Service Life Extension Program (CV SLEP) shipyard, which virtually ensures them a steady workload well into the late 1990's. As the only west coast conventional naval shipyard, Long Beach does not enjoy the steady workload the CV SLEP program affords to Philadelphia, or the high priority and narrower market enjoyed by the nuclear capable naval shipyards.

You requested that we identify areas where the public shipyards can remain competitive bidders based on a near-term projection of the Navy's ship overhaul and repair requirements. We are not seeking a solution which identifies market segments which favor public competition. We are pursuing initiatives to make LBNS and tne other public shipyards more efficient and therefore more competitive.

When the Congress directed the Navy to reassign the U.S.S. *Halsey* New Threat Upgrade (NTU) overhaul from LBNS to public/private competition, shipyard management took actions to not only meet this challenge in the near term but to also establish a truly competitive posture for the long haul. These actions were:

(1) Reducing the yard's overhead burden by 18–21 percent by abandoning the traditional matrix organization and shifting to a project management-style organization. The new structure was designed for the most efficient and lowest cost accomplishment of direct reimbursable work, without sacrificing the yard's tradition for quality.

(2) Downsizing the organization to a 1,400 production worker floor, retaining the ability to fluctuate rapidly between 1,400 and 1,200 production workers. The downsizing is to be a combination of non-replacement of attrition, early retirement, layoff of temporary employees and reduction-in-force.

(3) Using the more competitive man day rates obtained by accomplishment of the reorganization and downsizing to target, bid for, and win a complex, long-term (12 month) repair project, specifically an NTU overhaul that will fill in the hole created by the loss of the *Halsey*.

These initiatives have been successfully tested in the marketplace. On May 9, Long Beach Naval Shipyard was awarded the U.S.S. *Callaghan* (DDG 993) NTU overhaul. The successful bid on *Callaghan* does not change the requirement to downsize, or to reorganize. The next challenge for the shipyard is to validate the new, streamlined organization through actual production performance.

Without the free enterprise market force of competition, many of these initiatives were unlikely to evolve. The challenge of increased productivity lies at the very heart of the Navy's strategy for ship repair and overhauls. Our continuing objective is best value to the Fleet in both the public and private sectors for the near-term and in the future.

SEALIFT

Senator Wilson. In his fiscal year 1988 military posture statement before the House and Senate Armed Services Committees, Admiral Crowe estimated that in any major overseas development, sealift ships would deliver about 95 percent of all dry cargo and 99 percent of all petroleum products. And as recently as April 18 of this year, General Duane Cassidy of the Military Transportation Command noted that a mechanized Army division needed more than 100,000 tons of cargo for deployment and over 1,000 tons a day for re-supply, amounts which exceed the capacity of air transport alone. Despite these expressions of concern by the Department's top uniformed leadership about the sealift shortfall, there apparently exists no operational requirement to begin any new programs such as high-speed unit equipment ships or product tankers. How does the Navy plan to address the evident sealift requirement?

Secretary Cheney. The Navy is working with the other concerned goverment agencies in development of a national sealift policy. We expect that sealift programs designed to meet military sealift requirements will follow the President's approval of that policy.

Questions Submitted by Senator John McCain

BUDGET REDUCTIONS

Senator McCain. What are the detailed reductions the new budget submission will cause in the United States, Navy, Marine Corps, Army, and Air Force force levels, manpower, and major equipment strengths if all currently planned changes in the FYDP are taken into consideration? Could you provide a detailed comparison of the levels projected for fiscal year 1994 in the FYDP prepared for the Reagan budget submission and your amended FYDP?

Secretary Cheney. Fiscal year 1990-91 and fiscal year 1994 budget reductions are provided in the attached tables.

ARMY BUDGET REDUCTIONS

Program/item	Fiscal year 1990			Fiscal year 1991			Fiscal year 1994		
	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget
Force levels:									
Mech Brigades	30	−1	29	30	−1	29		[Deleted]	
Pershing Bns	3		3	1	−1				
Atk Hel Bns (Div)	35		35	35		35			
Manpower (end-strength):									
Active Military	772,300	−7,900	764,400	772,400	−8,300	764,100		[Deleted]	
Reserve Military	322,000	−300	321,700	323,700	−600	323,100			
Nat Guard Military	458,000		458,000	458,800	−300	458,500			
Civilians	404,870	−645	404,225	404,797	−812	403,985			
Major equipment items:									
AH-64 Helo	72	−6	66	72	−6	66		[Deleted]	
UH-60 Helo	72	−11	61	72	−11	61			
Air Def/AT Sys	424	−234	190	669	−406	263			
Stinger	4,754	−2,379	2,375	7,203		7,203			
Army Tac Msl Sys	276	−124	152	452		452			

NAVY BUDGET REDUCTIONS

Program/item	Fiscal year 1990			Fiscal year 1991			Fiscal year 1994		
	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget
Force levels:									
Battle forces:									
Carriers	15	−1	14	15	−1	14		[Deleted]	
Cruisers/Destroyers	109	−9	100	100	−7	93			
Frigates	74	−4	70	74	−10	64			
Support forces:									
Support ships	49	−1	48	51	−1	50		[Deleted]	

NAVY BUDGET REDUCTIONS—Continued

Program/item	Fiscal year 1990			Fiscal year 1991			Fiscal year 1994		
	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget
Reserve ships (Cat A):									
Frigates	26	+4	30	26	+10	36			
Total ships	574	−11	563	571	−9	562			
Manpower (end-strength):									
Active military	597,600	−5,600	592,000	598,200	−6,200	592,000			
Reserve personnel	153,200	+200	153,400	153,800	+1,200	155,000		[Deleted]	
Civilians	339,578	+180	339,758	338,024	+194	338,218			
Major equipment items:									
F-14D/Remfg	18	−12	6	24	−12	12			
F/A-18	72	−6	66	72	−6	66			
SH-60F	18	−18		18		18			
T-45TS	24	−24		48	−24	24		[Deleted]	
Phoenix	420		420	420	−420				
SSN-688	2	−1	1						
MHC	3	−2	1						
LHD					+1	1			

USMC BUDGET REDUCTIONS

Program/item	Fiscal year 1990			Fiscal year 1991			Fiscal year 1994		
	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget
Force levels		No change			No change				
Manpower (end-strength)		No change			No change			[Deleted.]	
Major equipment items:									
C/MH-53E [1]	3	+20	23		+23	23			

V-22 [1]	12	−12		24	−24	

[1] Procured within the aircraft procurement, Navy appropriation.

AIR FORCE BUDGET REDUCTIONS

Program/item	Fiscal year 1990			Fiscal year 1991			Fiscal year 1994		
	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget	Jan 9 budget	Adjustment	Revised budget
Force levels		No change			No change				
Manpower (end-strength):									
Active military	571,000	−3,200	567,800	566,800		565,800			
Reserve military	201,100		201,100	201,300	+200	201,500		[Deleted.]	
Civilians	262,443	−89	262,354	261,680	+42	261,722			
Major equipment items:									
B-2									
Tacit Rainbow		[Deleted.]		[Deleted.]				[Deleted.]	
LANTIRN [1]	67	−67		67	−67				

[1] Navigational pods deleted in fiscal year 1990; targeting pods deleted in fiscal year 1991.

REVISED BUDGET SUBMISSION

Senator McCain. There are several questions I have previously addressed to the Under Secretary for Policy Designate where we have been informed that it has not been possible to get definitive answers because he is currently out of the country. Each question touches on much broader issues reflected in your revised budget submission. Could you provide responses that reflect your current thinking on these critical issues.

Your current budget effort reflects major resource changes which are forcing the Department to develop a completely different fiscal year 1990-fiscal year 1994 force posture from the one developed as a result of the Department's strategic planning, and PPBS efforts.

a. What can be done to create a situation where Congress receives budget submissions that involve realistic resource levels, and reflect the product of the department's full PPBS cycle, and are fully supported by suitable strategy and net assessment efforts?

b. Will you undertake to present this committee with specific suggestions and proposals for putting the planning and budget cycle back on track once the current budgeting and strategic review cycle is completed.

c. I have read reports that at least $47 billion more will have to be cut from the fiscal year 1990-fiscal year 1994 FYDP under current fiscal guidance assumptions. What assurance can you give us that if we do improve our PPB process we will not have to repeat this year's effort to tailor our forces and strategy to suit sudden major reductions in our defense budget?

Secretary Cheney. a. We're already doing what your question suggests. Our current program and budget development system calls for the completion of planning, programming, budgeting, and executing phases every two years. This biennial system was recommended by the Packard Commission and was supported by the SASC. We believe the 2-year budget it produces request realistic levels of resources. These biennial budgets are constrained by sensible technical and economic assumptions and are based upon a thorough strategic analysis and net assessment. The overall two-year budget request results from a complete PPBS cycle and represents the decisions of the President of the United States in consultation with me and other senior officials on what is required in the Defense Budget to carry out national defense strategy.

Confusion concerning our biennial budgeting process has resulted in large part because the Congress has not adopted the Packard Commission's recommendations to review and appropriate budgets every 2 years. As a result, the DOD now must update the second year of every biennial budget to account for changes brought about by the Congress during its appropriation of funds for the first year of the budget and for other fact-of-life changes. A decision by the Congress to proceed with the biennial budgeting process, including authorization and appropriation of funds for both years, would be very helpful. Moreover, if the Congress authorized and appropriated biennial budgets, the DOD, the Congress, and the private sector would all benefit from the increased stability resulting from the longer budget execution period.

I firmly believe that more must be done to stabilize the level of appropriations so that there are no radical funding changes from one year to the next. I think the budget resolutions could be very effective in bringing about the funding stability we seek. Currently the Budget Committees establish overall funding levels for three years, but only allocate funds to the appropriation committees for the first of those three years. Furthermore, the appropriation committees do not always comply with the funding limits they have been assigned. Even in cases where technical compliance has been observed, the Department often receives appropriations for unwanted programs along with instructions to absorb all or part of the cost by cutting the funding for other unspecified programs.

The budget committees could improve the overall stability of DOD's funding level by setting firm budget totals for three fiscal years and constraining the appropriations committees to meet the levels established in the budget resolutions. The attached table shows the extent to which DOD budgets, when finally approved by the Congress, vary from the initial congressional resolution covering future year budgets. I am also concerned about the extent to which the Congress appropriates money for projects we have not requested. For example, in the fiscal year 1989 appropriation, the DOD was required to finance almost one billion dollars of congressionally directed programs that had not been requested in the President's Budget Request. This action was necessary in addition to absorbing a reduction of $33 billion in programs compared to our initial budget request.

b. We believe that our planning and budget processes are "on track." The DOD has an excellent 2-year process for producing plans, programs, and budgets. We have provided the Congress with budgets based on fully formed programs developed by the military departments and defense agencies from general guidance that I and my predecessors have prepared for them.

The budget submitted in January by President Reagan was produced by the current biennial cycle. We will begin a new two-year process later this year by studying the threats we face and the goals we have set for ourselves to meet those threats. Our review of these topics will be completed this fall and the military departments and defense agencies will then propose fiscally constrained programs in early April of 1990. I will complete my review of their programs sometime in mid-summer after which the military departments and defense agencies will prepare budgets that support the program I have approved. I will review their budgets in the fall and forward a new biennial budget to the Congress in January of 1991. The final phase of our 2-year process is a review of our experiences as we execute the programs we have assembled with the funds that the Congress has appropriated. This phase gives us a chance to learn from our mistakes and our successes.

I am now reviewing the plans the department has for each phase of the PPBS. While I may eventually decide to make some changes, I think that the current system has served my predecessors very well. DOD has implemented the recommendations developed by the Packard Commission after its review of defense management processes. We have found their recommendations to be very helpful. The recommendations listed below, which were originally provided by the Packard Commission, continue to provide a prescription for reducing the complications and ensuing extra effort that is necessary to produce an approved budget:

> Biennial budgeting should be fully instituted with Congress both authorizing *and* appropriating defense funding for the 2 years.
>
> Congress should reduce the overlap, duplication, and redundancy among the many congressional committees and subcommittees now reviewing the defense budget.
>
> The leadership of both parties in the House and Senate should review the congressional process leading up to budget resolutions with the intent of increasing stability in forecasts for defense budgets for future years.
>
> The chairmen and ranking minority members of the Armed Services Committees and the Defense Appropriations Subcommittees should agree on a cooperative review of the defense budget that has the following features:
>
>> Review by the Armed Services Committees of the defense budget in terms of operational concepts and categories (e.g., force structure, modernization, readiness, and sustainability);
>>
>> Review and authorization of individual programs by the Armed Services Committees that concentrate on new defense efforts at key milestones—specifially the beginning of full-scale development and the start of high rate production—in terms of their contributions to major defense missions; and
>>
>> Review by the Appropriations Committees, using the new budget structured in terms of operational concepts and categories, to adjust the President's defense budget to congressional budget resolution levels through refinements based on information not available when the President's budget was formulated months earlier.
>
> Congress should adhere to its own deadlines by accelerating the budget review process, so that final authorizations and appropirations are provided to DOD on time, and less use is made of continuing resolutions.
>
> Congress should review and make major reductions in the number of reports it asks DOD to prepare and should closely control requirements for new reports in the future..

I suggest that the Congress seriously consider implementing the remaining Packard Commission recommendations.

c. Our PPBS process is not at fault here. The February 9, 1989 FYDP and the Amended FYDP, which is now being prepared, are both as realistic as we can make them. In fact, the $47 billion to which you refer exists because we want the FYDP to be a reasonable projection of the DOD program. Because we know we cannot forecast perfectly all of our future needs or anticipate correctly the amount of money that will eventually be appropriated for the DOD program, we have included two estimates in the FYDP to account for some of the uncertainty we face. The first is an allowance for unanticipated requirements (fiscal year 1992-94=$23.3B) and the second is an acknowledgement that some "outyear" programs will not materialize (fiscal year 1992-94=$-45B). The perception that these omnibus adjustments project some uncertainly about the other fiscal year 1992–94 FYDP programs is correct—and realistic.

Our experience suggests that, as the "outyears" come to be "budget years," a typical outyear in the FYDP turns into a budget proposal costing 2–3 percent less than its original "outyear" price. Characteristically, this is the net of reductions of 4 to 5 percent because of anticipated requirements that either need not or cannot be budgeted and additions of roughly 2 percent to meet unanticipated requirements. This being the case, we have developed our fiscal year 1992–94 programs at approximately a 2 percent higher level than the corresponding budget target. We consider this a reasonable planning posture for these years at this time. While the total program now shown for each year will decrease, we cannot specify by precisely what amount, or which specific programs will be reduced. Such details will be filled in as the "outyears" become "budget years" and our future requirements come more clearly into focus.

As I suggested earlier, I believe we must increase the stability of funding for the Defense Program from year to year. We need to reduce the turbulence in our procurement programs and in other areas as well. I'm ready to help with any good-faith attempt to do that.

COMPARISON OF DOD BUDGET REQUESTS, BUDGET COMMITTEE RESOLUTIONS, AND FINAL DOD APPROPRIATIONS

[Billions of dollars in budget authority]

Budget/fiscal year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Fiscal year 1982 budget:											
Request	221.8	254.1	288.5								
Resolution	221.8	251.5	285.7								
Appropriation	213.8										
Fiscal year 1983 budget:											
Request		257.5	284.7	330.0							
Resolution		248.1	273.2	316.6							
Appropriation		239.5									
Fiscal year 1984 budget:											
Request			273.4	321.6	356.4						
Resolution			261.5	288.9	320.6						
Appropriation			258.2								
Fiscal year 1985 budget:											
Request				305.0	349.6	379.2					
Resolution				284.5	315.3	349.9					
Appropriation				286.8							
Fiscal year 1986 budget:											
Request					313.7	354.0	401.6				
Resolution					294.4	314.7	337.5				
Appropriation					281.4						
Fiscal year 1987 budget:											
Request						311.6	332.4	353.5			
Resolution						290.8	303.2	317.7			
Appropriation						279.5					
Fiscal years 1988–89 biennial budget:											
Request							303.3	323.3	343.9		
Resolution							287.3	294.7	301.6		
Budget summit agreement (November 1987)							283.3	290.8			
Appropriation							283.8				
Amended fiscal year 1989:											
Request (fiscal years 1988–89 biennial January 1987)								323.3	343.9	364.9	
Budget summit agreement (November 1987)								290.8			
Amended fiscal year 1989 (January 1988)								290.8	307.3	324.3	
Resolution (June 1988)								290.8	303.8	316.2	

COMPARISON OF DOD BUDGET REQUESTS, BUDGET COMMITTEE RESOLUTIONS, AND FINAL DOD APPROPRIATIONS—Continued

[Billions of dollars in budget authority]

Budget/fiscal year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Appropriation								290.5			
Fiscal years 1990–91 biennial budget:											
Fiscal years 1990–91 biennial (January 1989) (Reagan)									305.6	320.9	335.7
Fiscal years 1990–91 biennial (February 1989) (Bush)									299.3	311.0	322.0
Fiscal year 1990 bipartisan agreement (April 1989)									295.6	311.0	322.0
Actual (September 1990)											

PLANNING, BUDGETING, AND NET ASSESSMENT

Senator McCain. Last year this committee successfully sponsored legislation that required the Department of Defense to introduce three major improvements in defense planning. These included a requirement that the defense budget be submitted with a net assessment that examined our mission capabilities over the next 5 years on the basis of the new budget and FYDP; a net assessment and data base that explained our arms control strategy; and a net assessment that called for a consolidated readiness plan and net assessment. Could you address your views as to how OSD can strengthen its efforts in each area, and complex with current legislation on a timely basis?

Secretary Cheney. The creation of these documents this year was, of course, a learning experience. Where these are required on an annual basis, this past experience will be of benefit in responding to these requirements in the future. The Department of Defense will make every effort in the future to have these reports, as well as the large number of other reports required by Congress, prepared in a timely manner so as to be of maximum benefit to you in your deliberations on legislation.

DOD NET ASSESSMENT EFFORTS

Senator McCain. Part of the problem in the Department's net assessment efforts seems to have occurred because the Department has understaffed and underfunded the Office of Net Assessment in OSD, and because the JCS Net Assessment effort does not have a full-time dedicated staff and has turned into a bureaucratic nightmare within the OJCS.

a. Could you address what you intend to do to improve the quality of the net assessment efforts within DOD?

b. Could you describe your views on how the Net Assessment Council can be strengthened?

c. Could you describe your views on the current subordination of OSD(NA) to OSD(ISA)? Given the importance of this activity, should it not report directly to you?

d. Could you describe your views on the current role, staffing, and budget of OSD(NA)? What do you feel should be done to strengthen this office?

e. What do you feel can be done to improve the cooperation between OSD and OJCS in ensuring that the OJCS net assessment activity reflects realistic scenarios, that documents like MOP-39 do not create a barrier to effective cooperation between OSD and OJCS, and that the chairman's net assessment has a significant and timely impact on OSD planning, programming, and budgeting activities?

Secretary Cheney. a. The quality of net assessment efforts within the Department can be significantly enhanced by closer collaboration between all offices involved in the production of net assessments. I will urge Paul Wolfowitz, the Deputy Secretary for Policy, to use the Net Assessment Coordinating Committee (NACC) as a vehicle to develop cooperative efforts throughout the Department aimed at improving the quality of net assessments. Also, I will ask the Under Secretary for Acquisition to increase the net technical assessment effort that has recently been restarted.

b. The Net Assessment Coordinating Committee, which is co-chaired by the Under Secretary of Defense for Policy (USDP) and the Director of the Joint Staff (DJS), was established in June of 1986 in response to NSDD 219. Originally, the membership of the NACC was limited to the Department; however, last year it was expanded to include members of the Intelligence Community. The major focus of the NACC has been the coordination and approval of those net assessments prepared specifically for release outside the Department. In my view, the NACC is performing well. I will charge the USDP to develop the NACC as a forum for exchanging information on ongoing net assessment activities, for maintaining continuous liaison between the various agencies involved, and to resolve any issues or problems related to the net assessment process. In addition to continuing its present activities, I will also urge him to have the NACC encourage the development of a comprehensive program to develop improved analytical tools for net assessment. These should help all net assessment efforts.

c. OSD/NET Assessment was subordinated under OSD/ISA as a consequence of the departure of Fred Ikle, the former Under Secretary for Policy; however, this was understood to be temporary. Net Assessment is properly subordinate to the Under Secretary for Policy in accordance with the current DOD Directive 5105.39. Now that Mr. Wolfowitz has taken office Net Assessment will again report directly to the USDP, and through him, to me.

d. In my judgement, the role of OSD/Net Assessment should not be substantially modified. The office has, since 1973, provided the Secretaries of Defense with net assessments of the capabilities of U.S. military forces to perform the objectives and missions assigned them as compared to the capability of the potential enemies opposing them. The office should continue to provide analyses of key trends affecting these military balances, and diagnoses of existing or emerging problems and opportunities. This is essential to improving capabilities for strategic planning.

I believe the efforts of Net Assessment should be oriented primarily towards supporting the planning process that should precede programming and budgeting. I see the role of Net Assessment as contributing to the formulation of major issues, emerging strategic problems, and possible opportunities that deserve the attention of the Department's leadership.

Over a period of years, Net Assessment has produced balance assessments in a number of different areas. As a result of the high quality of their work and expertise in various areas, the Net Assessment staff has been asked to take on an increasing number of other tasks that may detract from the primary function of the office. I see this as a possible problem, given the limited staff and the considerable time and effort it takes to produce high quality net assessments. Therefore, I will have the USDP review the work load of the office and its staffing to determine how best to focus more effort on net assessment.

Another way in which the efforts of Net Assessment can be significantly increased is to increase research and study funds available. A long-standing task of Net Assessment has been a long-term research program to improve the quality of data and methods of analysis for net assessment. The office has enjoyed considerable success. I intend to ask that more funds be made available.

e. I will encourage and support further collaboration between OSD/Net Assessment and the Joint Staff's net assessment efforts. However, while the multi-scenario type of net assessment that Net Assessment produces may suit the needs of the Department's policy and strategic planning needs, it may not be best for all organizations within DoD. Due to the large number of participants involved in the Chairman's Joint Military Net Assessment (JMNA) effort, a commonly-agreed scenario may be necessary. I do believe, however, that the Chairman's baseline scenario should be as realistic as possible. Further, I intend to encourage the Chairman to include the OSD/Net Assessment analysts, at least informally, in the JMNA process.

I will work with the Chairman to explore solutions to the problems MOP 39 presents. While I am sensitive to the needs of the Chairman to safeguard sensitive joint planning information there may be ways in which the provisions of MOP 39 may be selectively lifted or waived.

Senator McCain. OSD(ISP) has been charged with taking the lead in producing the arms control strategy and net assessment. Last year it had problems in properly staffing this document, conducting the research and net assessment work required, and ended in submitting a draft with little practical value for inter-agency review. Will you take action to ensure that this effort is properly staffed in the coming years, and that Congress is provided with a detailed and comprehensive document?

Secretary Cheney. The Arms Control Strategy Report required by section 906 of the fiscal year 1989 Defense Authorization Act has been delayed for a number of reasons, such as the transition between administrations and the national security review directed by the President. It would serve no purpose to provide Congress with an incomplete draft report that may not adequately reflect the views of the Bush administration, this report has not been submitted to Congress. However, under the circumstances, we been as forthcoming and responsive as possible. Last November, Secretary Carlucci forwarded the requested unclassified and classified NATO and Warsaw Pact Data Base to the NSC. In response to Senator Nunn, and in accordance with the schedule suggested by the Senator, an even more detailed proposed unclassified data base has been forwarded to the NSC within the last 30 days.

NATO AND WARSAW PACT

Senator McCain. OSD(NA) has been charged with developing a comprehensive classified and unclassified annual data base on NATO and Warsaw Pact.

a. The classified document has been awaiting release by the NSC for over 2 months. Will you take action to try to obtain the release of this doucment?

b. The Department has not complied with legislation in preparing an adequate unclassified document and has prepared a draft summary whose totals have been altered to try to make them track with those used by NATO for political reasons.

Deputy Secretary Taft has taken action to try to correct this situation and ensure the Department will prepare an objective and comprehensive unclassified document. Will you make a firm commitment to provide such an unclassified document that fully conforms to the legislation passed by Congress and which provides all the required detail?

Secretary CHENEY. a. Net Assessment was not charged with the responsibility of developing a comprehensive classified and unclassified data base on NATO and the Warsaw Pact. Rather, Secretary Carlucci tasked the NACC in July 1988 to compile these data bases for the President in order to respond to the requirements incorporated within the Fiscal Year 1989 Defense Authorization Act. These products were due to Congress no later than 1 December 1988. Secretary Carlucci forwarded both the classified and an interim unclassified product to the White House in late November 1988. However, for various reasons they have not been forwarded to Congress. I will make every effort to expedite their delivery to Congress.

b. I am committed to delivery of an unclassified data base to Congress that is responsible to congressional legislation. The NACC is in the final stages of producing an unclassified data base to meet the June 1, 1989 date proposed by Senator Nunn in his letter to Secretary Carlucci last November. The data base itself will be completed prior to 1 June; however, the database may be slightly delayed due to follow-on declassificaiton procedures. Since both the classified and unclassified data bases are annual products, I will undertake measures to insure that in the future they are both delivered to the Congress by the required due date.

FUNCTIONS OF COMPTROLLER AND PA&E

Senator MCCAIN. The present structure of DOD splits the function of Comptroller and PA&E, and fails to develop the kind of long-term-mission-oriented defense budget that would support effective internal planning or external review. Could you describe how you intend to improve both the internal organization and leadership with OSD, and the way in which the defense program and budget are formulated and submitted to Congress?

Secretary CHENEY. First, let me point out that the offices of the Comptroller and PA&E have been separate components of the Office of the Secretary of Defense for more than 20 years. They perform quite different functions for the Secretary. Nonetheless, they have always worked closely together during all phases of the planning, programming, and budgeting process.

Second, I am not going to speculate on changes that I might decide to pursue concerning the organization of my office. When our ongoing management review has been completed, and the Deputy Secretary and I have had an opportunity to review its recommendations, I will decide what management changes might need to be made.

Regarding mission-oriented planning and budgeting, the Department has reviewed plans and programs in mission terms for many years. Indeed, the FYDP summarizes our programs along mission and functional lines. Our budget, on the other hand, is organized along appropriation lines, as mandated by the Congress. Selected elements of my staff are now studying ways—such as using a mission orientation—in which the DOD program and budget might be presented in more meaningful terms, both for internal review purposes and to the Congress. This work is in its initial stages. Should the results be promising, I will then be in position to start discussing possible changes in Congressional review procedures that would give you a better understanding of the content of, and rationale for, the Defense program.

BIENNIAL BUDGET

Senator MCCAIN. The Department has strongly supported the concept of a biennial budget submission. Last year this resulted in a situation where Congress did agree on a spending limit, but the actual planning, programming, and budgeting process virtually collapsed. The Department had no valid projections beyond the current fiscal year, no real idea of its long term mission capabilities or procurement budget, and had to make constant adjustments in its current budget as it became apparent that trying to freeze the budget 2 years in advance in a climate of major federal budget deficits did little more than create chaos. Can you describe how the Department will deal with a similar situation this year, and can you assure us that the Department will be able to answer all questions relating to the FYDP and long term capabilities and costs of each program and line item?

Secretary CHENEY. I believe you are referring to 1987, not 1988. At that time, the Department submitted its first biennial budget to the Congress, and simultaneously altered its internal review procedures to implement the recommendations of the

Packard Commission regarding adoption of a biennial process. Certainly, there was some turbulence as these changes were made, but the basic procedures did not collapse. In addition, as I said earlier, part of the confusion occurred because the Congress chose not to implement fully the Packard Commission recommendations with regard to authorizing and appropriating defense budgets for two years. In the midst of implementing its own procedural changes, the Department was forced to revise the fiscal year 1989 portion of the biennial budget to allow for a separate annual review.

Our biennial planning, programming and budgeting process, which is now fully in place and operating smoothly (in fact, the fiscal year 1990–91 budget was produced through that process) should limit any problems that might occur from our perspective.

Also, I can assure you that we will continue in the future our long-standing practice of providing the Congress the best answers we can to the questions we are asked.

LONG-TERM PROJECTION OF FORCES AND COSTS

Senator McCain. What can be done to ensure that the testimony the Department provides to Congress will include a long term projection of forces and costs that covers the entire FYDP, and not simply the kind of 1 year or 2 year "snap shot" we have had in the past?

Secretary Cheney. The Department now provides the Congress the entire FYDP, which includes a long-range projection of forces, costs, and manpower. In addition, testimony in support of particular budget items specifically addresses the longer-term implications of those programs.

UNDERCOSTING OF DEFENSE BUDGET

Senator McCain. I have heard informal reports from within the Department of Defense that the defense program presented in fiscal year 1990/fiscal year 1991 defense budget was severely undercosted, and that the true cost of manpower is 4 to 6 percent higher than budgeted, that this is true of O&M, and that RDT&E and procurement are underfunded by 7 to 12 percent. Can you comment on the extent of this problem and—if it existed—provide us with either a plan of action to correct the situation or a firm assurance that we can hold you to next year that such undercosting does not exist?

Secretary Cheney. The Defense programs in the fiscal year 1990/fiscal year 1991 Budget Revision are priced using the Administration's most current economic assumptions. The budget was not undercosted at the time of preparation.

AH–64

Senator McCain. It is my understanding that in the Defense Resources Board (DRB) deliberations leading up to the final decision on Army aviation programs, the AH-64 Apache attack helicopter was planned to be procured under a multi-year contract for 5 years at 60 per year, which would complete the buy-out of the Army's planned production run of 975 Apaches. At the last minute the Army persuaded you to fully fund the future LHX program and therefore to terminate the Apache after buying only another 120 aircraft. Is that a correct summary of how the decision was made?

Secretary Cheney. The DRB studied all feasible procurement options, economic order quantities, and warfighting requirements. The decision to buy the quantity of 132 AH-64s, 66 in fiscal year 1990 and 66 in fiscal year 1991, for a total of 807 was the smartest business decision that would provide a balanced Army Aviation procurement strategy, support the Army Aviation Modernization Plan, and satisfy the Army's warfighting needs.

In our deliberations, the Army recommended that I concurred, that the LHX program ought to be fully funded. Because of fiscal constraints we could not continue the procurement of Apache beyond fiscal year 1991.

Senator McCain. The shortfall of Apache helicopters will be a minimum of 170, enough to equip 7 attack helicopter battalions. The original requirement was for 1,206 AH-64s, a shortfall of 400 AH-64s, or 50 percent. What will the Army do to make up for that shortage of anti-armor combat capability?

Secretary Cheney. The procurement objective for the AH-64 has increased over the years (446, 593, 675, 975 and 807). Although less than the requirement, it is consistent with other major weapon systems. The number 1,206 resources 56 attack battalions to include training base, 10 percent operational float and 5 percent repair cycle float. Nine of the battalions were in component 4 and we could not provide the people and normal unit equipment, even if the aircraft were procured. The reduction is approximately 15 percent or 7 of the 47 resourceable battalions. This is an acceptable near-term risk that will be offset with the fielding of LHX armed reconnaissance helicopters beginning in fiscal year 1997. The LHX will complement the AH-64 Apaches, increasing their lethality and survivability while improving the overall warfighting capability. Increasing the number of Apaches and not fielding the LHX would have less warfighting capability because of reduced survivability. Must not mortgage the future for the present or allow the US to lose its technological lead in attack helicopters.

Senator McCain. How will the total of modern United States attack helicopters in 1990 compare with that of the U.S.S.R.? How do you project this balance will change by 1995? What will be the overall balance of NATO and Warsaw Pact attack helicopters in 1990 and 1995?

Secretary Cheney.

	1990	1995
U.S.S.R.:		
Hind (D, E, F)	[Deleted]	[Deleted]
Hip E [1]		
Havoc		
Hokum		
Subtotal		
United States:		
OH-58D (ARMED)	15	15
AH-1 (E, F, P, S)	1,035	553
AH-64	730	800
Subtotal	1,780	1,368
TOTAL:		
WARSAW PACT	1,790	2,306
NATO	2,390	2,128

[1] Actually an assault helicopter but frequently counted as an attack helicopter.

Senator McCain. If the 300 Apaches needed by the Army were bought with a 5-year multi-year procurement contract, how much would be saved as opposed to buying them on 5 single-year contracts at 60 per year?

Secretary Cheney. Our latest figures show we would expect a savings of between $475–$500 million for a 60 per year, 5-year multiyear procurement as compared to a 60 per year, 5-year single year procurement of Apaches.

LHX

Senator McCain. The LHX program has been fermenting for 6 or 7 years now, making very slow progress, and producing constant changes in the Army's aviation plan, the configuration of the LHX, and in its cost. Aren't there significant risks involved in relying on the LHX program? Can you assure us that the LHX will be in production in 1997, as currently planned? What is the list of risks involved in terms of technology, cost, mission capability, and impact on the U.S.-Soviet and NATO-Warsaw Pact balance?

Secretary Cheney. The LHX program has progressed through a series of planned and effective concept exploration and demonstration validation (DEM/VAL) efforts. Competitive Advance Rotorcraft Technology Integration contracts were awarded late in fiscal year 1984 to the four major helicopter development corporations in this country for the development of designs for an advanced integrated/automated cockpit and full-mission simulations. These contracts were expanded in fiscal year 1985 to conduct preliminary design of electro-optical systems and Very High Speed Integrated Circuit (VHSIC) electronics for the LHX. Risk reduction contracts for wind tunnel tests and engineering simulation of handling qualities were awarded in the fourth quarter of fiscal year 1985. Competitive DEM/VAL contracts were awarded in November 1988, to two competing teams (Boeing/Sikorsky and McDonnell/Bell) to complete the preliminary design of the aircraft and mission equipment package, and demonstrate performance of the technologies which will be included in the LHX design. All these contractual efforts have focused on reducing risk prior to entering Full Scale Development. The T800 engine development has proceeded smoothly on cost and schedule. In 1988, the team of Garrett Turbine Engine Company and the Allison Division of General Motors Corporation was selected as the winner following an intense three year competition with over 8,000 hours of engine testing. The T800 engine has met or bettered all performance, supportability, and cost goals. The Army already has in place production and operating cost guarantees for the LHX power plant.

The LHX has not caused any change in the Army's aviation plan, rather it is the centerpiece of the plan and the Army's highest priority RDT&E program. The LHX will be a lightweight, low cost helicopter that will retire the current fleet of tactically obsolescent AH-1, OH-6, and OH-58A/C helicopters for the primary missions of attack, armed reconnaissance, and air combat. LHX, incorporating new technologies, will correct the major deficiencies, such as maneuverability and agility; survivability; and high cost of ownership compared to existing helicopters.

The LHX configuration has remained essentially constant since program outset, i.e., a lightweight advanced technology helicopter. Following detailed studies and simulation, the Army decided that LHX would be a two seat system to enhance overall operational effectiveness. The combat ready empty weight will not exceed 7,500 pounds and unit flyaway costs, based upon planned competitive production rates, will not exceed $7.5 million (fiscal year 1988).

The Army firmly believes risks associated with the LHX program are acceptable, based upon extensive risk reduction efforts during the competitive concept exploration and DEM/VAL phases. The LHX program cost estimate has been validated by several independent analyses. The budget for fiscal year 1990 funds the completion of DEM/VAL. A major product of this phase is the full life cycle cost commitment from each of the competing teams. These commitments/guarantees provide confirmation of program costs before entering FSD. Based on current information, the budgets for fiscal years 1991–94 are fully sufficient to execute FSD, then enter low rate initial production in fiscal year 1995 and full production in fiscal year 1997.

The LHX will favorably impact the U.S.-Soviet and NATO-Warsaw Pact conventional force balances through achievement of leap-ahead combat effectiveness, much high battlefield survivability, higher readiness, and improved safety, while requiring fewer resources to sustain tactical operations.

V–22

Senator McCAIN. As we look at the threat in the years ahead, it would seem that with Mr. Gorbachev's emphasis on glasnost that the probability of a nuclear confrontation with the Soviets may be reduced. At the same time, as we look around the world both now and in the last 40 years, the threat of U.S. involvement in a conventional war or brush fire type conflict remains high. One of the most serious deficiencies that we have in fighting a conventional war is the ability to get forces to the fight. With the V–22 we will gain a significant capability to rapidly deploy troop transport and combat support aircraft to distant objectives quickly. I speak of the tilt-rotor's capability of self-deploy anywhere in the world with or without tanker support. If we don't have enough amphibious ships, and if we need the ability to deploy worldwide, then why would we want to abandon an aircraft program that provides such a tremendous capability in self-deployability?

Secretary CHENEY. The V–22 is expected to be a capable aircraft. This was a very difficult decision but within a total force perspective, it was the right choice. The ability to self-deploy with or without tanker support is an important advantage. In order for that capability to be useful, we also need the trained Marines and soldiers, equipment, weapons and ammunition to fight and the capability to transport those forces worldwide. However, these various capabilities need to be in balance. The decision on the V–22 helps strike that balance within the limited resources available.

Senator McCAIN. For the past 8 years this committee has held hearings on the JVX and V–22 programs. We have fully supported them each year. We have listened to witnesses from OSD, the Navy, and the Marine Corps. Three of those witnesses during the 8 years have been Commandants of the Marine Corps, General Barrow, General Kelly, and now General Gray. Each has said that the V–22 is the Marine Corps' most important aviation program. Each was an infantry officer with the experience of three major wars. Each has said that the V–22 was vital to Marine Corps mission accomplishment. Would you please tell the committee what newfound evidence after 8 years of review by OSD, the Navy, the Marine Corps, and Congress has been discovered to indicate the program should be canceled?

Secretary CHANEY. The V–22 is a very expensive system and one that fulfills a relatively narrow operational requirement. We fully considered the Marine Corps' needs in reaching our budget decisions.

Senator McCain. The V-22 is not another DIVAD—V-22 FSD has been a success story. Although first flight was delayed, Aircraft #1 is flying and performing better than expected. Why are we to stop a successful program?

Secretary Cheney. The Department faced some very difficult choices in constructing budget recommendations. The V-22 recommendation was based on affordability, within a total force perspective.

Senator McCain. As we face declining defense budgets it is critical that we get our money's worth with defense programs. It seems to me that V-22 does that by giving us significantly more combat capability at lower overall cost—why are we taking a shortsighted view by focusing primarily on procurement cost rather than capability and life cycles costs?

Secretary Cheney. We are taking a rational, long-term approach to this difficult issue.

At current and projected levels, we cannot afford this program. Although the alternative is somewhat less capable, it is less costly and less risky. Twenty-year discounted costs show the alternative to be several billion dollars cheaper than the V-22. During the 5-year defense planning period, fiscal years 1990-94, V-22 procurement costs would be nearly ten billion dollars compared with less than three and a half billon dollars for the alternative helicopter force.

Past estimates of O&S costs for new aircraft systems have often proven to be optimistic. If that were to be the case with the V-22, the helicopter alternative would be even more attractive. To the extent that helicopter forces can be assigned to the reserves, the advantage of the alternative grows. The capability to double-sling High Mobility Multipurpose Wheeled Vehicles (HMMWV) has been demonstrated and affects costs directly. We may not be able to double-sling HMMWVs in all operational situations; however, to plan now never to do so would be an extreme case. To the extent that we plan to double-sling, the alternative also becomes more attractive.

Finally, our capability to conduct opposed amphibious operations has improved considerably in the recent past. Further enhancements must be considered in the context of other related systems and forces.

Senator McCain. While I appreciate that there are tough choices to be made, it seems to me that we have a national asset at risk as a result of your decision to cancel the V-22. Congress has reviewed this program carefully each year and has solidly supported it. We have spent billions of dollars developing this technology for the United States, to meet a military requirement, and to reap the benefits it will bring to civil aviation. And now, as we see the results of years of hard work and expenditures coming to fruition, we are going to simply "cancel"? Isn't this a rather shortsighted view of things?

Secretary Cheney. The V-22's increased capabilities are primarily useful in a narrow mission area. That mission can be performed—though with some reduced capability—by helicopters.

Senator McCain. Are we really willing to tell our young marines and soldiers that they must survive on the battlefield of the 21st century with systems developed in the 1960s? Isn't that in essence what we are doing if we cancel the speed, range, and survivability of the V-22 for the slower and much less survivable traditional helicopter alternatives?

Secretary Cheney. The V-22 is expected to be a very capable system which would make a significant contribution to the over the horizon amphibious assault mission. But, at current budget levels, cancellation of V-22 represents the best force balance for our national defense posture.

Senator McCain. We are all concerned with the budget deficit and getting the most bang for the buck with our defense dollars. It seems to me that when we add manpower requirements, and life cycle cost, for the proposed alternative helicopters instead of continuing with V-22, then we end up spending more dollars for the alternatives, and getting much much less capability. Would you please submit for the record the cost comparisons your staff used at reaching the recommendation that the V-22 be canceled?

Secretary Cheney. The cost comparisons used in reaching the decision to cancel the V-22 are shown in the following tables. The comparisons are for Marine Corps and Navy missions. All costs for fiscal year 1989 and prior years are assumed to be sunk and are excluded from the comparison. The procurement costs shown in the "V-22—NTE & Dual Source" line assume that the pilot lot Not-To-Exceed (NTE) option is preserved and that all aircraft after that lot are procured under a dual source strategy (i.e. two production lines) at prices substantially below those in the pilot lot. The procurement costs shown in the "V-22—Adjusted NTE & Coproduction" line assume that the pilot lot NTE option is not preserved, that aircraft costs increase consistent with Bell/Boeing's latest NTE pilot lot proposal (34 percent higher), and that the aircraft are procured under a coproduction acquisition strategy. This alternative estimate is believed to be a more realistic estimate of the likely schedule and cost of the program than the dual-source estimate. (On *cost*, it reflects the latest cost data possessed by the contractors. On *schedule*, it does not require fabricating the pilot lot aircraft with less than 12 months of flight testing, as the dual-source estimate requires.)

The source of the (O&S costs for all aircraft is the April 1986 V-22 Decision Coordinating Paper (DCP), prepared for the V-22 Milestone II decision. (The cost figures assume all manpower is active.)

The procurement costs for the CH-53, CH-60, and HH-60 were also taken from the V-22 DCP. A discount rate of 10 percent was used, in accordance with normal procedures. Undiscounted figures are shown in Table 2.

As can be seen from Table 1, when you consider the different timing of expenditures for the V-22 versus CH-53E/CH-60 options (which is the purpose of discounting), in all cases the CH-53E/CH-60 options are preferred. The procurement costs of the CH-53E/CH-60 options are substantially less than that of V-22, overwhelming any operating savings that the V-22 may produce.

Moreover, the operating costs in these tables use the actual costs of the CH-53E and Seahawk helicopters as against the projected cost of V-22 operations. Typically, operating cost estimates at the development stage of a program underestimate actual operating costs. For example, actual F-15 and F-16 operating costs are about 80 percent higher than those estimated at a comparable early stage of those programs.

Even if the Department accepted projected V-22 operating costs and ignored the different timing of expenditures (thus using the undiscounted figures of Table 2), the CH-53E/CH-60 option is less costly *unless* use of the CH-53 is limited to the so-called "single sling" option—i.e., it is never allowed to carry more than one High Mobility Multipurpose Wheeled Vehicle (HMMWV) at a time. (It is capable of carrying more than one, but it is argued that in some tactical/operational situations it should not—never allowing it to do so is an extreme case.) If indeed such an extreme single-sling limit were imposed, the Department would have to re-examine whether all of the approximately 350 HMMWVs involved were needed in the early stages of an amphibious operation, or whether some of the equipment carried by these HMMWVs could be put on lighter vehicles.

TABLE 1.—COMPARISON OF V-22 ALTERNATIVES

[Discounted constant fiscal year 1988 dollars in millions]

Alternative	RDT&E	Proc	O&S [1]	Total
V-22 (602 aircraft):				
NTE and dual source	382	9,602	2,045	12,029
Adjusted NTE and coproduction	382	11,299	2,044	13,725
Terminate V-22/buy alternative aircraft mix—single sling:				
CH-53E (376 aircraft)	–	[2] 3,506	2,150	
CH-60/HH-60 (590 aircraft)	143	3,132	1,489	
Total	143	6,638	3,639	10,420
Terminate V-22/buy alternative aircraft mix—double sling:				
CH-53E (225 aircraft)	–	[2] 2,694	1,506	
Ch-60/HH-60 (478 aircraft)	143	2,775	1,297	
Total	143	5,469	2,803	8,415

[1] O&S costs include phase in costs and 20 year study state costs.

[2] During the budget adjustment deliberation, an extra $216M (discounted constant fiscal year 1988 dollars) was added to the CH-53E (fiscal year 1990-94) to achieve more robust support and spares funding. The adjusted totals for the single sling option and the double sling option should be $10,636M and $8,631M, respectively.

TABLE 2.—COMPARISON OF V-22 ALTERNATIVES

[Fiscal year 1988 constant dollars in millions]

Alternative	RDT&E	Proc	O&S [1]	Total
V-22 (602 aircraft):				
NTE and dual source	428	16,185	10,502	27,115

TABLE 2.—COMPARISON OF V-22 ALTERNATIVES—Continued

[Fiscal year 1988 constant dollars in millions]

Alternative	RDT&E	Proc	O&S [1]	Total
Adjusted NTE and coproduction	428	19,875	10,500	30,803
Terminate V-22/buy alternative aircraft mix—single sling:				
CH-53E (376 aircraft)	–	[2] 6,998	11,187	
CH-60/HH-60 (590 aircraft)	167	7,192	8,588	
Total	167	14,190	19,775	34,132
Terminate V-22/buy alternative aircraft mix—double sling:				
CH-53E (225 aircraft)	–	[2] 4,188	6,207	
CH-60/HH-60 (478 aircraft)	167	5,827	7,025	
Total	167	10,015	13,232	23,414

[1] O&S costs include phase in costs and 20 year steady state costs.

[2] During the budget adjustment deliberations, an extra $257M (constant fiscal year 1988 dollars) was added to the CH-53E (fiscal year 1990-94) to achieve more robust support and spares funding. This amount is not relfected in the cost shown here. The adjusted totals for the single sling and the double sling options should be $34,389M and $23,671M, respectively.

QUESTION SUBMITTED BY SENATOR SLADE GORTON

SHORTAGE OF TRITIUM

Senator GORTON. To the extent that you can in an unclassified fashion, please share with us your concerns regarding the shortage of tritium this country will be facing in the near future. Have you communicated your concerns to the Secretary of Energy?

Secretary CHENEY. The detailed requirements for tritium and other critical nuclear materials are established by the Presidentially-approved Nuclear Weapons Stockpile Memorandum (NWSM). However, tritium production has been at a standstill since the spring of 1988. Given the need to replenish decaying tritium in the U.S. stockpile of nuclear weapons, a crisis situation is upon us. Failure to promptly establish an adequate and reliable production capability for tritium will, in fact, lead to a material shortfall impacting nuclear weapons stockpile planning. The exact date at which the United States stockpile would be affected is highly classified.

For the near term, the three Savannah River reactors are the only adequate available source of new tritium. They must be restarted as soon as safely possible. But these reactors are already 30 years old, so the President's budget calls for the construction of two new reactors to constitute a reliable source of tritium into the twenty-first century. Should the Savannah River reactors become nonoperational before the new reactors can be built, the Department of Energy is examining several interim production alternatives. Funding has been requested for target development which would make it possible to produce tritium in existing light water reactors.

On May 22, 1989, the Secretary of Energy and I discussed thoroughly the issue of tritium production.

[Whereupon at 12:35 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991

THURSDAY, MAY 4, 1989

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

AMENDED DEFENSE AUTHORIZATION REQUEST (FISCAL YEARS 1990 AND 1991) AND THE 5-YEAR DEFENSE PLAN (FISCAL YEARS 1990–1994)

The committee met in open session, pursuant to notice, at 9:36 a.m., in room SR–253, Russell Senate Office Building (Commerce Committee Room), Senator Sam Nunn (chairman) presiding.

Committee members present: Senators Nunn, Exon, Levin, Kennedy, Dixon, Glenn, Warner, Thurmond, Cohen, McCain, Wallop, Gorton, Lott, and Coats.

Committee staff members present: Arnold L. Punaro, staff director; Richard D. DeBobes, counsel.

Professional staff members present: Robert E. Bayer, John J. Hamre, David S. Lyles, Michael J. McCord and William H. Smith.

Minority staff members present: Patrick A. Tucker, minority staff director and counsel; Romie L. Brownlee, deputy staff director for the minority; Robert F. Bott, Brian D. Dailey, George W. Lauffer, Durwood W. Ringo, Jr., and Mark B. Robinson, professional staff members.

Staff assistants present: Barbara L. Braucht, Lori M. Jackson, Cindy Pearson, Kelli J. Pronovost, Debra A. Rice and Mickie Jan Wise.

Committee members' assistants present: Jeffrey B. Subko, assistant to Senator Exon; Kenneth N. Luongo, assistant to Senator Levin; William J. Lynn, assistant to Senator Kennedy; Phillip P. Upschulte and Milton D. Beach, assistants to Senator Glenn; Jefferson B. Seabright, assistant to Senator Wirth; Terrence M. Lynch, assistant to Senator Shelby; Christopher K. Mellon, assistant to Senator Cohen; Anthony H. Cordesman, assistant to Senator McCain; Jack D. Crouch II, assistant to Senator Wallop; Robert M. Soofer, assistant to Senator Gorton; Charles Pearcy, assistant to Senator Lott; and Eric H. Thoemmes, assistant to Senator Coats.

OPENING STATEMENT OF SENATOR SAM NUNN, CHAIRMAN

Chairman NUNN. The committee will come to order. The committee meets this morning to receive the testimony from the Chiefs of

Staff of the four military services on the amended fiscal years 1990–1991 defense authorization request and on the relationship between our military strategy and the budget request. The Chiefs' testimony follows a series of strategy-related hearings by the committee on the implications of President Gorbachev's security and economic policies, on the negotiations on conventional forces in Europe and on our military strategy and operational requirements.

We have had these discussions with outside witnesses as well as with Admiral Crowe and with the combatant commanders. Yesterday we began a review of the amended fiscal years 1990–1991 authorization request with testimony from Secretary Cheney and Admiral Crowe. Senator Warner and I have asked our witnesses this morning, the chiefs of each one of the military services, to focus their testimony on how the services' fiscal years 1990–1991 authorization request supports the objectives of our military strategy and the operational requirements of the combatant commanders.

These are the issues they must wrestle with each day as the head of each service and as members of the Joint Chiefs of Staff, the major missions of the Defense Department and the priorities that should be assigned to these missions and the relationship of the services' budgets to these priorities.

At this time I want to welcome Gen. Carl Vuono, Chief of Staff of the Army; Adm. Carlisle Trost, Chief of Naval Operations; Gen. Al Gray, Commandant of the Marine Corps; and Gen. Larry Welch, Chief of Staff of the Air Force.

After such of you have given your opening statement, we will of course have a number of questions for you.

Senator Warner.

Senator WARNER. Mr. Chairman, I will put my statement in the record. I join you in welcoming these distinguished gentlemen.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT OF SENATOR JOHN WARNER

Mr. Chairman, I join in welcoming the Chiefs of our services to testify before this committee. It is always helpful to have their views and insights on the vital subject of our national security.

During periods of extreme and continuing budgetary reductions, it is natural for the services to compete fiercely for the increasingly scarce defense dollars. But—we depend on each of you, our service Chiefs, to rise above the interservice rivalries and competition to propose and recommend what is best for the national security of this country. I know each of you personally and I know that you will do just that.

All of us face very difficult decisions in an unclear, changing world. Our defense budget is shrinking. Since 1985, funding for national defense has not even kept pace with the rate of inflation. Fiscal year 1990 marks the fifth consecutive year of real decline in the defense budget—which has shrunk more than 12 percent in real terms since 1985.

There are those who propose that we make even more significant reductions in defense based on the Gorbachev initiatives—the changes which may be going on in the Soviet Union. Mr. Gorbachev has been getting quite a lot of credit in the media for steps he proposes to take, such as cutting back forces in Europe, cutting back military spending by 14 percent, and reducing forces along the Chinese border.

But we must remember that these are, at present, only intentions. I would like to see the United States get a little credit for cutbacks we have already made, such as eliminating 2,400 tactical nuclear warheads from the NATO inventory, reducing military strength by 14,000 personnel, eliminating two air wings and 16 Navy frigates, and reducing military spending by over 12 percent in real terms since 1985. The United States made these cutbacks while Soviet military production was increasing, including after Gorbachev came to power.

It is true that some of these actual cutbacks were made for the sake of economy and deficit reduction. But it is also true that many of Mr. Gorbachev's proposed cutbacks may be driven by purely economic considerations. The Soviet Union is a country which, despite its military might, cannot provide basic consumer goods for its people. Serious food shortages exist, and the Soviet economy is unable to produce sugar for coffee or cookies, or basic items such as hairdryers.

The Soviet Union does appear to be extending a friendlier hand toward the West. There is a Soviet oil skimmer assisting in the cleaup at Valdez, Alaska, and Mr. Gorbachev has extended an invitation to the Queen of England to pay a visit to the Soviet Union. This seems a far cry from the same Soviet Union who moved to install nuclear missiles in Cuba and built the Berlin Wall. But remember, the Soviet Union is still bankrolling Castro's communism as well as Nicaragua's, and the Berlin Wall still stands.

Whether for political or budgetary reasons, or perhaps as a result of arms control agreements, we may redeploy all or major portions of our forward-based forces. We will then be faced with the problem of moving them back to the scene of conflict in an emergency.

Therefore, we will become even more reliant on flexible, responsive, mobile forces. Mobility—both airlift and sealift—will become even more critical. Our ability to protect the sea lines of communication with surface naval forces and anti-submarine warfare forces will be essential.

All of us hope for a more peaceful world with greatly reduced tensions between the free democracies of the west and the Communist bloc.

But until we witness a great reduction in the vast Soviet military capabilities, we must maintain our own capabilities and remember the lessons we have learned from a policy of "Peace through Strength".

Chairman NUNN. We are pleased to have all of you. Before starting with General Vuono, I would like to have Senator Dixon's statement inserted for the record.

[The prepared statement of Senator Dixon follows:]

PREPARED STATEMENT OF SENATOR ALAN J. DIXON

I am pleased to welcome here today the top leaders of our military services. Each service has made difficult choices to stay within the constraints that have been placed on the Defense budget, and the Congress is facing the difficult task of reviewing the options that have been selected.

I believe we are headed in the right direction in many areas of this amended budget. Backing away from the goal of a 600-ship Navy and transferring ships and aircraft to the Reserves are realistic approaches to reducing the Navy's budget. In the strategic arena, cutting funds for the strategic defense initiative and the B-2 bomber so that technological advancements and problems can be fully evaluated is a prudent course to take. In the tactical arena, I concur that we need to continue funding the F-16 and AV-8B aircraft, and other programs and production rates that are not recommended for reduction or cancellation.

However, there are programs that are slated for cancellation that I believe are needed to modernize our conventional forces. It is premature, in my view, to cancel the F-15E dual-mission capable fighter before its successor, the advanced tactical fighter, has been successfully evaluated. By canceling the V-22 Osprey transport helicopter, we will not be improving our marine assault capability and the marines will have to continue relying on an aging—and less capable—CH-46 helicopter transport fleet.

As chairman of the Subcommittee on Readiness, Sustainability and Support, I am pleased that our naval steaming time will not be reduced and that flying time for our aviators will not be cut. However, I am disturbed that maintenance and repair backlogs will grow and that marine training exercises will be curtailed. I am particularly troubled by the cuts in ammunition procurement and the fact that war reserves will also be hurt by the cuts.

In reviewing this current budget proposal or any future budget proposal, we should remember that the American taxpayer is fed-up with cost overruns, weapons that do not meet specifications, and extremely expensive weapon systems. I was struck by a recent Washington Post article about Air Force requests for more money to improve the B-1B and the B-2 bombers. With these additional funds the B-1B program will exceed its funding ceiling, and the additional money will not enable the plane to meet its original specifications. Furthermore, the Air Force wants to spend more money on the B-2 bomber, which already will cost at least

$500 million per plane and will, in all likelihood, cost more than that. The Air Force strategic bombing program is just one of many programs that need to be improved or canceled. It is exactly the type of program the taxpayer points to when talking about waste and mismanagement in the Defense Procurement System.

In coming to an agreement on the amended Defense budget, the individual services did not strongly support all the changes that were made. I'm anxious to hear their respective views concerning the newly submitted budget.

Chairman Nunn. General Vuono, we will begin with you.

STATEMENT OF GEN. CARL E. VUONO, CHIEF OF STAFF, U.S. ARMY

General Vuono. Mr. Chairman, members of the committee, it is a pleasure to appear before all of you today to report on the state of the Army and explain our priorities for fiscal years 1990–1991. My formal statement provided to you for the record and the Army posture statement provide much greater detail of the strategic roles of the Army, our posture today, and our azimuth for the future.

My remarks this morning will be brief and will focus primarily on our needs in 1990 and 1991. As you very well know, our strategic responsibilities necessitate the proper mix of readiness, modernization, force structure, and sustainment. We can neither focus on our near-term needs to the exclusion of the future, nor can we focus on the future to the exclusion of our mission to be ready today. Therefore, our mix of forces, active and reserve, heavy, light, special operations, forward deployed and those based in the United States must be continuously tailored to evolving U.S. strategic requirements, national commitments, and the requirements of the war-fighting commanders in chiefs [CINCs].

The Army budget and our 5-Year Defense Plan are shaped to enable us to be that strategic force. We have critical needs in five areas that I want to mention to you this morning.

First, quality. The highest priority that I attach to anything we do is the quality of the force, our ability to recruit and retain high-quality soldiers. It is my view that quality is the bed rock on which the Army has been building over the past number of years. It allows us to include flexibility in our doctrine, enables us to transition to more complex and sophisticated weapon systems, but most of all, quality is a key ingredient in building readiness. There is an interrelationship, in my view, between quality personnel and readiness. High quality people are a prime contributor to readiness, and high readiness is a critical factor in retaining quality personnel. So we need your help in the area of quality to assure that we retain support for the pay raise and those quality of life programs in our budget that are so essential to retaining soldiers.

We especially need support for our recruiting programs and the Army College Fund for all of our soldiers.

The second critical area is readiness. The key factor which allows us to both deter and defend is the high readiness of all of our forces. Training is the cornerstone of that readiness. This means that to achieve and maintain the degree of readiness necessary, we must allocate adequate funds to support training events themselves and the installation functions which support training.

So our training, our OPTEMPO, and funds for operations and maintenance have been protected to the greatest degree we possibly could in the building of this Army budget. I ask for your full support in this area.

Next is force structure. Our strategy and the requirements of the CINCs demand a force structure of the proper quality, composition, and size. In my view, we cannot afford to cut forces purely for short-term savings, when we take our strategic roles, worldwide commitments, and conventional arms control negotiations into account.

Modernization. The process of modernizing is continuous to all of us in the Army. It is intended to produce the war-fighting capabilities we need to meet our worldwide threats. While the process goes on today, the pace has slowed dramatically. We have made a conscious decision to scale back on acquisition of current systems to protect both near-term readiness and our ability to achieve overmatch against the threats in the future.

Our strategy for modernization and supporting modernization plans provides a disciplined process and allows us to adjust to changes in the threat, technology, and resource levels. The revised Army budget has caused some significant changes in those programs, and what I ask for is your support for our modernization strategy.

A final area I want to mention is worldwide lift. While the Army has commitments and missions worldwide, we depend on our sister services for the sealift and airlift to get our forces where they need to go. I believe we must enhance our national capability in both sealift and airlift. Since this is a mission outside our program areas, I seek your support because I am a customer for the command that provides that sealift and airlift for the Army.

In closing as we look forward we must continually and carefully maintain the trained-and-ready status of the Army upon which our security rests. This will call for the right mix of readiness, modernization, force structure, and sustainability that minimizes the risk to our Nation. The Army has revised its budget and made adjustments necessary to produce what I believe is the optimum mix and balance among the areas with the resources we have been provided. For a small army to fulfill its essential strategic roles supporting national security interests, there can be no substitute for quality and no retreat from readiness.

I assure you we will continue to build for the future in these areas as we work through the budget constraints that face all of us.

So, Mr. Chairman, the Army budget that this committee will consider is one that, to the best of our ability, enables us to fulfill our strategic roles. We have kept foremost our national security interests and objectives, priorities established by President Bush, and the requirements of our field commanders-in-chief. I want to assure you that with your continued support and help, we will provide the United States a trained-and-ready Army today and tomorrow. Thank you.

[The prepared statement of General Vuono follows:]

STATEMENT BY GENERAL CARL E. VUONO
CHIEF OF STAFF, UNITED STATES ARMY

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

IT IS A PRIVILEGE FOR ME TO APPEAR BEFORE YOUR COMMITTEE TO REPORT ON THE STATE OF THE UNITED STATES ARMY AND TO EXPLAIN OUR PRIORITIES FOR FISCAL YEARS 1990 AND 1991. AS YOU KNOW, WE HAVE REVISED THE BUDGET WE SUBMITTED IN JANUARY. WE DEVELOPED THIS REVISED BUDGET FOLLOWING CONSULTATION WITH THE COMMANDERS-IN-CHIEF, THE OFFICE OF THE SECRETARY OF DEFENSE, AND OUR SISTER SERVICES. IN MY COMMENTS TODAY, I WILL ADDRESS THE MOST SIGNIFICANT CHANGES AND THEIR IMPACT, AS WELL AS PROVIDE YOU THE INFORMATION YOU NEED TO UNDERSTAND THE CURRENT POSTURE OF THE ARMY, THE IMPORTANCE OF THE ARMY'S CONTRIBUTIONS TO THE COMMON DEFENSE, AND MY ASSESSMENT OF THE DIRECTION WE MUST TAKE AS WE ENTER THE FINAL DECADE OF THE TWENTIETH CENTURY.

STRATEGIC BASIS

THE UNITED STATES IS EXPERIENCING A PERIOD OF SUCCESS IN SECURING ITS VITAL INTERESTS. OUR NATIONAL SECURITY STRATEGY HAS GUIDED US IN ASSISTING OUR ALLIES AND FRIENDS, IN DETERRING OUR POTENTIAL FOES, AND HAS BEGUN TO BEAR FRUIT AT THE ARMS CONTROL NEGOTIATING TABLE. THIS SUCCESS, PERHAPS UNPRECEDENTED IN UNITED STATES PEACETIME HISTORY, IS DUE IN LARGE MEASURE TO SOUND POLICY BACKED BY THE VISIBLE, CREDIBLE, CAPABILITIES AND READINESS OF OUR ARMED FORCES.

THE UNITED STATES ARMY HAS CONTRIBUTED TO THIS SUCCESS. THE ARMY HAS BEEN DELIBERATELY CONFIGURED TO SUPPORT U.S. NATIONAL SECURITY OBJECTIVES AND MEET OUR COMMITMENTS WORLDWIDE. IT IS DESIGNED TO FULFILL THE STRATEGIC ROLES UNIQUE TO THE ARMY BASED ON OUR ASSESSMENT OF THE INTERNATIONAL SECURITY ENVIRONMENT AND THE CHALLENGES TO U.S. VITAL INTERESTS THROUGHOUT THE WORLD. IT IS FOCUSED ON PROVIDING THE TRAINED AND READY FORCES NEEDED BY THE U.S. COMMANDERS-IN-CHIEF WHO ARE CHARGED WITH IMPLEMENTING OUR MILITARY STRATEGY. THUS, THE COMPOSITION OF THE ARMY — HEAVY FORCES, LIGHT FORCES, AND SPECIAL OPERATIONS FORCES; ACTIVE AND RESERVE; FORWARD DEPLOYED FORCES AND FORCES POISED IN THE UNITED STATES FOR RAPID RESPONSE TO CONTINGENCIES WORLDWIDE OR TO REINFORCE FORWARD DEPLOYMENTS — IS BASED ON THE NEEDS OF OUR STRATEGY.

THE ARMY'S REQUIREMENTS, THEREFORE, ARE THE REQUIREMENTS OF THE UNITED STATES FOR LAND FORCES THAT CAN IMPLEMENT ITS NATIONAL SECURITY STRATEGY AROUND THE WORLD.

THE INTERNATIONAL SECURITY ENVIRONMENT

WHILE WE KNOW THAT THE CHALLENGES TO OUR NATIONAL SECURITY ARE CHANGING, NEITHER THE NEAR-TERM NOR MUCH LESS THE LONG-TERM IMPLICATIONS OF THESE CHANGES ARE AT ALL CLEAR. MY CONCERNS ARE THREEFOLD.

— FIRST, I DO NOT DOUBT THAT CERTAIN FUNDAMENTAL CHANGES ARE UNDERWAY IN THE SOVIET UNION. MOREOVER, THOSE CHANGES CAN BE VERY BENEFICIAL TO THE UNITED STATES AND TO THE ENTIRE COMMUNITY OF NATIONS, IF THEY ACTUALLY RESULT IN A LESS AGGRESSIVE SOVIET UNION WITH FUNDAMENTALLY CHANGED INTERNATIONAL OBJECTIVES. HOWEVER, EVEN IF THE SOVIETS FOLLOW THROUGH WITH THE REDUCTIONS AND CHANGES WHICH THEY HAVE ANNOUNCED, THEY WILL STILL MAINTAIN A VERY SUBSTANTIAL NUMERICAL SUPERIORITY AND A THREATENING PRESENCE WITH THEIR LAND FORCES IN EUROPE.

— SECOND, WHILE WE ALSO APPLAUD THE ANNOUNCED REDUCTION IN MILITARY PRODUCTION BY THE SOVIET UNION, WE HAVE SEEN NO EVIDENCE THAT THE DEVELOPMENT AND DEPLOYMENT OF THE MOST MODERN COMBAT SYSTEMS HAVE IN ANY WAY SUBSIDED. IT IS POSSIBLE THAT, EVEN AFTER MAKING THE ANNOUNCED REDUCTIONS, THE SOVIET UNION AND ITS WARSAW PACT ALLIES WILL RETAIN MANY OF THE ADVANTAGES THEY CURRENTLY ENJOY OVER NATO FORCES.

— THIRD, AND MUCH MORE COMPLEX, IS THE THREAT SITUATION DEVELOPING IN THE REST OF THE WORLD. PERIODS OF CHANGE PRESENT A FERTILE ENVIRONMENT FOR INCREASED INSTABILITY AND INCREASED DANGER. IN THIS INCREASINGLY MULTIPOLAR WORLD, WE FACE THE POTENTIAL OF MULTIPLE THREATS — FROM COUNTRIES AND FACTIONS WHICH ARE BECOMING MORE SOPHISTICATED MILITARILY AND MORE ASSERTIVE POLITICALLY.

ALL THREE OF THESE TROUBLING SITUATIONS POINT TO THE NEED FOR MAINTAINING A TRAINED, READY, AND FLEXIBLE CONVENTIONAL GROUND COMBAT CAPABILITY IN THE UNITED STATES ARMY.

THE ARMY AS A STRATEGIC FORCE

WITHIN THIS BROAD NATIONAL SECURITY CONTEXT, I WANT TO REVIEW BRIEFLY THE KEY ROLES THAT THE ARMY PLAYS, BOTH IN PEACE AND WAR.

WE OFTEN ASSOCIATE THE TERM "STRATEGIC" WITH LONG-RANGE NUCLEAR FORCES. THESE NUCLEAR FORCES ARE, OF COURSE, ESSENTIAL TO OUR NATIONAL SECURITY STRATEGY. WE MUST RECOGNIZE, HOWEVER, THAT THE U.S. ARMY IS ALSO A STRATEGIC FORCE, ONE WHICH PLAYS UNIQUE AND IRREPLACEABLE ROLES IN SECURING THE COMMON DEFENSE. GROUND FORCES ARE ESSENTIAL TO ADVANCING OUR PEACETIME SECURITY INTERESTS AND TO DETERRING AGGRESSION. GROUND FORCES ARE THE ULTIMATE MEANS TO DEFEAT AGGRESSION AGAINST OUR CITIZENS, OUR TERRITORY, AND OUR INTERESTS.

THE FOUR WARS THAT WE HAVE FOUGHT IN THIS CENTURY HAVE REAFFIRMED THAT WAR ON ANY SCALE CENTERS ON THE CONTROL OF LAND, PEOPLE, RESOURCES, AND THE ADVERSARY'S WAR MAKING CAPABILITIES. WHILE THE UNIFIED ACTION OF ALL SERVICES IS ESSENTIAL IN MODERN WAR, ONLY GROUND FORCES CAPABLE OF SUSTAINED OPERATIONS ARE ABLE TO EXERCISE DECISIVE CONTROL AND TERMINATE THE CONFLICT ON TERMS FAVORABLE TO THE UNITED STATES AND ITS ALLIES.

TO MEET OUR NATIONAL SECURITY OBJECTIVES, THE UNITED STATES AND ITS ALLIES MUST UNDERSTAND THE POTENTIAL ADVERSARIES' INTENTIONS AND BE PREPARED TO CONTEND WITH THE ENTIRE RANGE OF ADVERSARY CAPABILITIES. THREE ELEMENTS OF THE THREAT ARE ESPECIALLY IMPORTANT IN UNDERSTANDING THE STRATEGIC CONTEXT IN WHICH THE ARMY AND ITS SISTER SERVICES MUST OPERATE.

— FIRST, WHILE OUR NUCLEAR FORCES REMAIN THE BEDROCK OF DETERRENCE, OUR CONVENTIONAL FORCES ARE INCREASINGLY IMPORTANT AS AN ALTERNATIVE TO EARLY NUCLEAR USE. THE INF TREATY REINFORCES THIS TREND.

— SECOND, WHILE THE U.S. IS CERTAINLY CHALLENGED BY OTHER THREATS NOT DIRECTLY SPONSORED OR CONTROLLED BY THE SOVIET UNION, THE USSR AND ITS ALLIES REMAIN THE PRINCIPAL THREAT TO OUR INTERESTS IN SPITE OF THE SIGNIFICANT CHANGES THEY ARE EXPERIENCING. THEY WILL POSE THE MOST SIGNIFICANT QUANTITATIVE AND QUALITATIVE CHALLENGE TO OUR SECURITY FOR THE FORESEEABLE FUTURE.

— FINALLY, THE SET OF PROBLEMS GENERALLY ASSOCIATED WITH THE DEVELOPING WORLD — INSURGENCY, TERRORISM, CHEMICAL WEAPON PROLIFERATION, AND THE DRAMATIC GROWTH OF CONVENTIONAL MILITARY CAPABILITIES IN MANY DEVELOPING COUNTRIES — REMIND US OF THE NEED FOR FLEXIBILITY, MOBILITY, AND A GROUND FORCE CAPABLE OF SUSTAINED OPERATIONS ACROSS THE ENTIRE SPECTRUM OF CONFLICT.

TO PROTECT AND ADVANCE OUR SECURITY INTERESTS IN THE INTERNATIONAL ENVIRONMENT I HAVE OUTLINED, THE ARMY NEEDS FORCES THAT CAN MEET THE CHALLENGE OF A PARTICULAR CONFLICT, YET ARE SUFFICIENTLY FLEXIBLE TO BE USEFUL ACROSS A VARIETY OF TYPES OF CONFLICT. WITH THE RESOURCES IT IS PROVIDED, THE ARMY MUST ACHIEVE AN OPTIMAL MIX OF HEAVY, LIGHT, AND SPECIAL OPERATIONS FORCES; OF U.S.-BASED AND FORWARD-DEPLOYED FORCES; OF COMBAT AND SUPPORT FORCES; AND OF ACTIVE AND RESERVE COMPONENTS.

ARMY FORCES, CAPABLE OF OPERATING IN HIGH-, MID-, AND LOW-INTENSITY CONFLICTS PLAY UNIQUE ROLES.

— IN AREAS WHERE THE UNITED STATES HAS VITAL INTERESTS — SUCH AS EUROPE AND NORTHEAST ASIA — FORWARD-DEPLOYED ARMY FORCES REPRESENT OUR NATION'S MOST LASTING, POWERFUL AND, HENCE, CREDIBLE COMMITMENT. IN UNDEVELOPED AREAS, ECONOMY OF FORCE AREAS, OR REGIONS WHERE POLITICAL CONDITIONS MILITATE AGAINST FORWARD DEPLOYMENT, RAPIDLY DEPLOYABLE ARMY FORCES REPRESENT A REALISTIC COUNTER TO ANY AGGRESSOR'S THREAT.

— TO PROVIDE CONTINGENCY FORCES ADEQUATE TO MEET CHALLENGES ANYWHERE, THE ARMY MAINTAINS UNMATCHED FORCIBLE ENTRY CAPABILITIES. OUR 82ND AIRBORNE DIVISION, 75TH RANGERS AND SPECIAL FORCES UNITS CAN CONDUCT PARACHUTE ASSAULTS OR CLANDESTINE INSERTIONS ANYWHERE IN CONFLICT OF ANY LEVEL. THE XVIIITH AIRBORNE CORPS HEADQUARTERS AND ITS SUPPORT UNITS, AS WELL AS THE AIR ASSAULT AND HEAVY FOLLOW-ON UNITS, GIVE US THE ABILITY TO PROJECT AND EMPLOY A FULLY SUPPORTED CORPS ANYWHERE, UNDER THE MOST EXTREME CONDITIONS.

— IN COMBAT, ROBUST GROUND FORCES CAPABLE OF SUSTAINED OPERATIONS CAN DISSUADE AN AGGRESSOR FROM EXPANDING THE CONFLICT. CONVERSELY, IF REQUIRED BY NATIONAL AND ALLIANCE STRATEGY, ARMY FORCES PROVIDE AN EXCELLENT INSTRUMENT TO WIDEN A CONFLICT THROUGH AN INTERTHEATER SHIFT OF FORCES, BY A MAJOR AIRBORNE OPERATION, OR BY MEANS OF IN-THEATER DEEP OPERATIONS.

— THE ARMY IS IDEALLY ORGANIZED TO ASSIST IN, OR FIGHT, LOW-INTENSITY CONFLICTS. AMONG THE SERVICES, THE ARMY ALONE HAS THE CAPABILITY TO ESTABLISH THE INFRASTRUCTURE FOR A THEATER OF WAR. JUST AS IMPORTANT, MANY OF THE KEY TYPES OF FORCES NEEDED TO ENGAGE IN OR HELP OTHERS TO COMBAT LOW-INTENSITY CONFLICTS EXIST ONLY IN THE ARMY. AMONG THESE ARMY-UNIQUE FORCES ARE: THE SPECIAL FORCES, THE RANGERS, PSYCHOLOGICAL OPERATIONS UNITS, AND CIVIL AFFAIRS UNITS.

TODAY'S TRAINED AND READY ARMY

I AM PROUD TO SAY THAT TODAY'S ARMY IS TRAINED AND READY, REFLECTING THE HIGHEST QUALITY IN ITS HISTORY. WE HAVE MADE GREAT PROGRESS IN THE PAST DECADE, DUE IN NO SMALL PART TO THE LEADERSHIP IN THE EXECUTIVE BRANCH AND IN THE CONGRESS, INCLUDING MANY HERE TODAY ON THIS COMMITTEE.

OVER THE LAST TEN YEARS, WE HAVE MARKEDLY IMPROVED THE QUALITY OF THE FORCE. THIS QUALITY HAS ENABLED US TO ACCOMPLISH MORE COMPLEX MISSIONS, TRAIN TO HIGHER STANDARDS, EQUIP OUR ARMY WITH THE MOST MODERN EQUIPMENT, AND CONTINUE TO DEVELOP OUTSTANDING LEADERS. IN SHORT, QUALITY GIVES US THE FLEXIBILITY WHICH IS SO ESSENTIAL FOR OUR SMALL ARMY TO MEET ITS WORLDWIDE COMMITMENTS. I WANT TO REVIEW THE MAIN ELEMENTS OF THIS SUCCESS:

— THE PAST DECADE HAS SEEN A REVITALIZATION OF ARMY DOCTRINE. TODAY'S AIRLAND BATTLE DOCTRINE IS THE BASIS FOR TRAINING OUR FORCES FOR THE DEMANDS OF TODAY'S AND TOMORROW'S BATTLEFIELDS, INCLUDING THE ESSENTIAL CONTRIBUTIONS OF OUR SISTER SERVICES AND ALLIES.

— WE HAVE CONFIGURED OUR FORCE STRUCTURE SPECIFICALLY TO MEET OUR STRATEGIC REQUIREMENTS. HOWEVER, OUR STRUCTURE IS PERILOUSLY SMALL — THE SMALLEST SINCE 1950 — GIVEN WORLDWIDE REQUIREMENTS FOR U.S. LAND FORCES. TODAY WE HAVE THE RIGHT MIX OF FORCES — HEAVY, LIGHT, SPECIAL OPERATIONS — BUT WE HAVE THEM IN INADEQUATE NUMBERS. MOREOVER, IN MY JUDGMENT WE ARE VERY CLOSE TO THE LIMIT OF RELIANCE THAT WE CAN SAFELY PLACE ON THE U.S. ARMY RESERVE AND ARMY NATIONAL GUARD, CONSIDERING OUR CURRENT NATIONAL STRATEGY, OUR DAY-TO-DAY COMMITMENTS, AND THE BURDEN OF OUR IMMEDIATE CONTINGENCY REQUIREMENTS. THE FURTHER REDUCTION TO ACTIVE ARMY FORCE STRUCTURE WHICH WE HAVE MADE, ADDED TO THE REDUCTION OF 1989, IN ORDER TO ACCOMMODATE THE REDUCED BUDGET, EXACERBATES THE ALREADY SUBSTANTIAL RISK TO OUR NATIONAL SECURITY OBJECTIVES AS A RESULT OF THE INCREASED GAP BETWEEN WORLDWIDE REQUIREMENTS AND THE FORCES WE CAN MAKE AVAILABLE.

— OUR TRAINING HAS IMPROVED SIGNIFICANTLY. TODAY WE CHALLENGE OUR QUALITY SOLDIERS, LEADERS, AND UNITS WITH TOUGH, REALISTIC TRAINING THAT PRODUCES THE READINESS UPON WHICH DETERRENCE DEPENDS. IT ALSO PROVIDES THE EXCITEMENT AND FULFILLMENT THAT KEEPS GOOD SOLDIERS IN OUR RANKS.

— OUR MODERNIZATION PROGRAMS CONTINUE TO REPLACE THE AGING EQUIPMENT THAT CHARACTERIZED THE ARMY A DECADE AGO. OUR GOAL IS TO MODERNIZE TO IMPROVE OUR WARFIGHTING CAPABILITY AGAINST POTENTIAL THREATS. UNFORTUNATELY, IN THE LAST FEW YEARS WE HAVE BEEN UNABLE TO MAINTAIN THE PACE OF MODERNIZATION DUE TO RESOURCE CONSTRAINTS. THE QUANTITY OF THE MODERN EQUIPMENT CURRENTLY FIELDED IS LESS THAN WE WOULD LIKE IN CONFRONTING THE SIZE, CAPABILITIES, AND COMPLEXITY OF THE THREATS WE FACE WORLDWIDE. MOREOVER, INCREASINGLY, THE MOST MODERN SOVIET EQUIPMENT IS CHALLENGING OUR TECHNOLOGICAL LEAD UPON WHICH WE AND OUR ALLIES HAVE RELIED SO HEAVILY IN THE PAST. WE ARE EXPERIENCING A QUANTITATIVE AND QUALITATIVE DISADVANTAGE IN GROUND FORCES AGAINST OUR PRIMARY ADVERSARY THAT IS UNLIKELY TO DISAPPEAR EVEN WITH FULL IMPLEMENTATION OF THE INITIATIVES GENERAL SECRETARY GORBACHEV HAS PUBLICLY ANNOUNCED. THE REVISED BUDGET WILL STILL IMPROVE OUR POSTURE IN THE FUTURE, BUT AT PACE THAT IS CAUSE FOR CONCERN. WE CANNOT INDEFINITELY CONTINUE TO PLACE AT RISK THE QUALITATIVE EDGE THAT WE MUST HAVE TO OFFSET THE QUANTITATIVE AND GEOGRAPHICAL ADVANTAGES OF OUR PRINCIPAL ADVERSARY.

— FINALLY, OUR LEADER DEVELOPMENT PROGRAMS FOR OFFICERS AND NONCOMMISSIONED OFFICERS ARE ONE OF THE MOST IMPORTANT WAYS WE MAINTAIN THE QUALITY FORCE AND ARE ALSO OUR GREATEST LEGACY BECAUSE THEY PROVIDE THE LEADERS THAT WILL SHAPE THE ARMY OF TOMORROW.

IN SPITE OF THE ACCOMPLISHMENTS OF THE PAST AND OUR CURRENT SUPERB QUALITY AND READINESS, WE HAVE A LONG MARCH AHEAD. WHILE WE ARE AT A PEAK OF QUALITY AND WARFIGHTING CAPABILITY, WE ARE ON THE MARGIN WHEN COMPARED TO THE REQUIREMENTS OF OUR STRATEGY AND THE INTERNATIONAL SECURITY ENVIRONMENT. WE HAVE SHORTCOMINGS WHICH MUST BE ADDRESSED. ADDITIONALLY, WE SEE OUR EXISTING QUALITY LEVEL AS VERY "PERISHABLE." TO MAINTAIN WHAT WE HAVE ACHIEVED AND

TO CORRECT OUR SHORTCOMINGS, WE NEED CAREFUL PLANNING AND STABLE FUNDING FOR THE FUTURE.

THE ROAD AHEAD

AS WE LOOK TO THE FUTURE, WE HAVE SIGNIFICANT CHALLENGES IN PRODUCING THE QUALITY AND SIZE LAND FORCE THAT OUR NATION'S MILITARY STRATEGY AND COMMITMENTS DEMAND.

— FIRST IS THE STRATEGY-FORCE CHALLENGE. OUR STRATEGY DEMANDS THAT WE MAINTAIN A FORCE STRUCTURE OF THE QUALITY, COMPOSITION, AND SIZE ADEQUATE TO MEET THE REQUIREMENTS OF THE COMBATANT COMMANDERS AND OUR ALLIANCES TO DETER, FIGHT, AND WIN ACROSS THE SPECTRUM OF CONFLICT. THE U.S. CANNOT AFFORD TO CUT FORCES PURELY FOR THE SHORT-TERM SAVINGS, PARTICULARLY IN LIGHT OF CURRENT WORLDWIDE COMMITMENTS TO THE COMMON DEFENSE, THE FORTHCOMING CONVENTIONAL ARMS CONTROL NEGOTIATIONS, AND THE REQUIREMENTS OF ALLIANCE SECURITY AND COHESION, WITHOUT CONSCIOUSLY ACCEPTING THE INCREASED RISK THAT WILL NECESSARILY RESULT.

— MAINTAINING THE QUALITY OF THE FORCE IS ANOTHER MAJOR CHALLENGE. HIGH QUALITY, RETAINABLE SOLDIERS, HAVE TO BE SUPPORTED BY FAIR AND ADEQUATE PAY, BENEFITS, AND QUALITY OF LIFE PROGRAMS. OUR BEST ANALYSIS OF THE ECONOMY AND U.S. DEMOGRAPHIC TRENDS INDICATE THAT WE CAN ONLY MEET U.S. REQUIREMENTS FOR QUALITY SOLDIERS WITH ENHANCED FUNDING OF RECRUITING PROGRAMS SUCH AS THE ARMY COLLEGE FUND AND INCREASED FUNDING FOR RECRUITING ADVERTISING, INCLUDING AN APPROPRIATE AMOUNT OF IT ORIENTED ON THE UNIQUE NEEDS AND CHARACTERISTICS OF THE ARMY. AS THE SECRETARY OF DEFENSE POINTED OUT IN HIS STATEMENT BEFORE THE HOUSE ARMED SERVICES COMMITTEE, THERE IS AN INTERRELATION BETWEEN READINESS AND QUALITY PERSONNEL. WE HAVE LONG FELT THAT QUALITY SOLDIERS AND ARMY READINESS ARE INEXTRICABLY LINKED: THE QUALITY SOLDIERS WE HAVE TODAY ARE A PRIME CONTRIBUTOR TO OUR HIGH LEVELS OF READINESS, AND THE INVESTMENT WE MAKE IN TRAINING AND IN MODERN, COMBAT READY EQUIPMENT KEEPS THOSE FINE YOUNG MEN AND WOMEN IN THE ARMY.

— MODERNIZATION IN THE YEARS AHEAD WILL CHALLENGE OUR INGENUITY AND DEMAND ADEQUATE AND STABLE RESOURCES. WE MUST CONTINUE TO DEVELOP AND FIELD HIGH QUALITY, TECHNOLOGICALLY SUPERIOR SYSTEMS WHICH SUPPORT OPERATIONS ACROSS THE ENTIRE

BATTLEFIELD AND CAN HELP US PIT OUR ENDURING STRENGTHS AGAINST AN ADVERSARY'S VULNERABILITIES. THE ARMY'S CURRENT MODERNIZATION STRATEGY IS DESIGNED TO ACCOMPLISH THAT. AS YOU KNOW, LAST YEAR WE REFINED OUR ARMY AVIATION MODERNIZATION PLAN TO REFLECT THIS STRATEGY. WE ARE DOING THE SAME IN THE OTHER MODERNIZATION AREAS, INCLUDING FIRE SUPPORT; HEAVY FORCES; WHEELED VEHICLES; COMMAND AND CONTROL; AIR DEFENSE; COMBAT SERVICE SUPPORT, AND SO FORTH. OUR STRATEGY AND THE SUPPORTING MODERNIZATION PLANS ENFORCE A DISCIPLINED PROCESS THAT ALLOWS US TO ADJUST TO CHANGES IN THE THREAT, TECHNOLOGY, AND RESOURCES. THE REVISED ARMY BUDGET KEEPS ALL OUR BASIC MODERNIZATION PLANS ON TRACK. HOWEVER, IN AVIATION WE HAD TO REDUCE THE SCOPE OF OUR PLAN SIGNIFICANTLY. WHILE WE WILL CONTINUE WITH THE LHX AS THE CENTERPIECE OF THE CAPABILITIES WE NEED FOR THE FUTURE, WE HAD TO SCALE BACK PROCUREMENT OF APACHE AND BLACKHAWK HELICOPTERS, AND TO TERMINATE THE OH-58D AHIP WITH THIS YEAR'S ACQUISITION. THESE AVIATION REDUCTIONS HAVE ALSO NECESSITATED A SLIGHT REDUCTION AND REDESIGN OF SOME OF OUR AVIATION UNITS. IN HEAVY FORCES, WE MAINTAINED ECONOMIC LEVELS OF PROCUREMENT FOR THE BRADLEY FIGHTING VEHICLE AND THE M1A1 ABRAMS TANK. WE ALSO CONTINUE OUR EVOLUTION TO THE FUTURE AS WE PRESERVE THE R&D INVESTMENT FOR THE IMPROVEMENTS WHICH WILL LEAD US TO THE M1A2 ABRAMS TANK BEGINNING IN 1992. IN BOTH OF THESE MAJOR AREAS, WE HAVE ACTED IN ACCORDANCE WITH ARMY PRIORITIES TO ACCEPT SOME DEGREE OF NEAR-TERM RISK IN ORDER TO ASSURE FUTURE CAPABILITY TO ACHIEVE OVERMATCH WITH RESPECT TO THE WORLDWIDE THREAT.

— FINALLY, ARMS CONTROL IS AN INCREASINGLY IMPORTANT CHALLENGE. THE UNITED STATES AND ITS NATO ALLIES ARE IN NEGOTIATIONS WITH THE SOVIET UNION AND ITS WARSAW PACT ALLIES ON CONVENTIONAL ARMED FORCES IN EUROPE (THE SO-CALLED CFE TALKS). THESE NEGOTIATIONS HAVE THE POTENTIAL TO ENHANCE THE SECURITY OF THE UNITED STATES AND ITS ALLIES. THE CFE NEGOTIATIONS PROMISE TO BE AMONG THE MOST COMPLEX AND DIFFICULT ARMS CONTROL NEGOTIATIONS EVER UNDERTAKEN. THE WEST MUST APPROACH THE CONVENTIONAL NEGOTIATIONS WITH STRENGTH, UNITY, CONFIDENCE, AND PATIENCE, SEEKING AN AGREEMENT WHICH SIGNIFICANTLY IMPROVES OUR PRESENT LEVEL OF SECURITY. HOWEVER, WE SHOULD NOT EXPECT ARMS CONTROL INITIATIVES TO REMOVE UNDERLYING CAUSES OF TENSIONS IN EAST-WEST RELATIONS, NOR SHOULD WE LET OTHER IMPORTANT BUT NEVERTHELESS ANCILLARY ISSUES — SUCH AS EXPECTATIONS THAT CONVENTIONAL ARMS CONTROL CAN REDUCE THE COST OF SECURITY — CLOUD OUR VISION.

TO SUM UP, AS WE LOOK AHEAD, WE MUST ALSO CAREFULLY MAINTAIN THE TRAINED AND READY STATUS OF THE ARMY UPON WHICH OUR SECURITY RESTS. THIS WILL CALL FOR THE RIGHT MIX OF READINESS, MODERNIZATION, FORCE STRUCTURE, AND SUSTAINABILITY THAT MINIMIZES THE RISKS TO OUR NATION. THE ARMY HAS REVISED ITS BUDGET AND MADE THE ADJUSTMENTS NECESSARY TO PRODUCE THE OPTIMUM MIX AND BALANCE AMONG THESE AREAS WITH THE RESOURCES WE WERE PROVIDED. FOR A SMALL ARMY TO FULFILL ITS ESSENTIAL STRATEGIC ROLES SUPPORTING U.S. NATIONAL SECURITY INTERESTS, THERE CAN BE NO SUBSTITUTE FOR QUALITY, NO RETREAT FROM READINESS. I ASSURE YOU WE WILL CONTINUE TO BUILD FOR THE FUTURE IN THESE AREAS DESPITE BUDGET CONSTRAINTS.

CONCLUDING STATEMENT

MR. CHAIRMAN, THE ARMY BUDGET THAT THIS COMMITTEE WILL CONSIDER IS ONE THAT, TO THE BEST OF OUR ABILITY, ENABLES US TO FULFILL OUR STRATEGIC ROLES. WE HAVE KEPT FOREMOST OUR NATIONAL SECURITY INTERESTS AND OBJECTIVES, THE PRIORITIES ESTABLISHED BY PRESIDENT BUSH, AND THE REQUIREMENTS OF OUR FIELD COMMANDERS-IN-CHIEF. I WANT TO ASSURE YOU, WE WILL CONTINUE TO PROVIDE THE UNITED STATES A TRAINED AND READY ARMY, TODAY AND TOMORROW.

[The Posture of the U.S. Army Fiscal Years 1990/91 is retained in committee files.]

Chairman NUNN. Thank you, General.

Admiral Trost.

STATEMENT OF ADM. CARLISLE A.H. TROST, CHIEF OF NAVAL OPERATIONS, U.S. NAVY

Admiral TROST. Good morning, Mr. Chairman and members of the committee. With your concurrence, I would like to submit for the record the rather brief statement which I have prepared in response to your letter calling the hearing. It does address the areas of interest which you set forth.

Chairman NUNN. Without objection, it will be put in the record and we will have all of your complete statements and attachments in the record, without objection.

Admiral TROST. If I may, I will briefly summarize. My statement includes a tutorial on the value of maritime forces to this Nation. Since the members of this committee are well versed on those subjects, I will not repeat them this morning. I will note that we went into the 1990 and out years budget process feeling that we were in quite good shape, in a good state of readiness, with especially high levels of personnel readiness, good sustainability for our forces, building toward the goals which have been long accepted in this country as necessary to meet our maritime responsibilities. When we found that the additional cuts were necessary to our original

1990 budget submission in order to meet the levels agreed to as an amended budget, we set several goals as first and foremost.

We decided we had to preserve the current readiness of our forces to meet the requirements of the unified commanders. That meant protecting our personnel posture to the maximum extent possible. It meant fully funding the readiness accounts, specifically the operations and maintenance accounts for steaming hours and flight hours. And we have done so.

We also felt that we had to protect our research and development accounts in order to protect future capability and to ensure that we did not build a great void for the future.

That left us with two primary areas in which to sustain those cuts. The principal cuts were made in force structure, both in ships that will be decommissioned earlier than previously planned and some cuts in new construction ships and in aviation procurement. This will build a problem into our out years—or build a problem for us in the out years. We took some cuts in sustainability, cutting back or curtailing procurement of certain types of weapons systems.

The impact of those cuts is several fold. Obviously, we would like to maintain the levels we had, but the budget does not permit that. We will be operating a smaller-sized Navy than we had anticipated, having been directed to hold our force levels at 14 carrier battle groups and having been directed to decommission earlier than planned some of our guided missile destroyers. The impact of that will be that we will continue to meet commitments but we will stretch our forces and our people, especially when we take into account the continuing role the military is expected to play in drug surveillance and interdiction. Many of the forces that have been used in that role are also the forces that are now being reduced. We feel that we can and will meet the commitments. When the call comes, forces will respond.

Secretary Cheney has pledged his support for the constraints on operational tempo of our forces in order to ensure that we do not put the burden of additional deployment on the backs of our people, and for that we are extremely grateful. We will, without question, meet certain commitments in the future with fewer forces. For example, smaller numbers of ships attached to a carrier battle group to carry out the same basic assignment. We will also count more heavily on our battleship battle groups to augment carrier forces in those areas where the air threat is less significant.

As we proceed to the future, my biggest concern is that we not lose sight of the need for a strong national defense in this country. There is a tremendous euphoria, both here and abroad, over the actions and the promises of Mr. Gorbachev as he proceeds with the policies which are intended to strengthen the economic posture of the Soviet Union. That euphoria seems to translate into reductions in defense, both by our allies as well as by our own forces. I think we need to be very, very careful to ensure that we recognize that it is only the levels of military strength that we have enjoyed in recent years that have permitted us some of the foreign policy successes as well as the ability to carry out our missions as successfully as we have.

Finally, I would like to urge the continuing support of this committee not just for a strong national defense but for stability in what we do. I would be among the first to say that we are doing a lousy job because there is no stability in the top line. We cannot plan for the out years. We cannot plan from one year to the next. We have this year gone through three budget iterations for the fiscal year 1990 budget, and frankly it is very frustrating to those of us who would like to be able to do a good job. And so we ask for your support. Thank you, sir.

[The prepared statement of Admiral Trost follows:]

STATEMENT OF

ADMIRAL C. A. H. TROST, USN

SENATE ARMED SERVICES COMMITTEE

State of the Navy

Our Navy has never been more ready to support U.S. national policy throughout the world. Over the past year, our forward deployed naval forces have provided a strong deterrent and made significant contributions to successful execution of U.S. security policy in the Persian Gulf as well as in every ocean of the world. Thanks to continued Congressional support, we have built the right kind of Navy. We have the right ships and the right aircraft to fight and win at sea and move personnel and equipment ashore where and when necessary. We want to continue the excellent working relationship we enjoyed with the 100th Congress and provide the balanced support necessary to meet the naval requirements of a maritime nation that is the leader of the free world.

Today, our powerful Carrier Battle Groups are the centerpiece of conventional deterrence for our forward deployed Navy. Aircraft carriers are capable of employing the full range of combat aircraft to provide air superiority for the accompanying surface combatants, allowing us to provide significant sustainable offensive combat power in support of U.S. interests around the globe. I want to emphasize that it is the extensive capability and adaptability of our embarked carrier air wings, unique in the world, that makes the large deck carrier the preferred weapon system whenever our national interests are at risk. More than any other investment in overall national security, our carriers have repaid their full value to this country in real world impact as well as continuing conventional deterrent capability.

The Navy's contribution to strategic nuclear deterrence, in the form of the Trident/D5 system, continues to provide the most cost-effective and survivable element of the triad forming our nation's nuclear deterrent force.

We have also made great improvements in the Navy's Strategic Sealift programs. Since 1980, the Navy has expended $6.9 billion on new ship construction and conversion, including fast sealift ships, expansion of the Ready Reserve Force, Maritime and Afloat Prepositioning Ship programs, hospital and aviation logistics ships, and the sealift enhancement program of seasheds and container ship cargo stowage adapters.

The budget submit will enable us to meet the challenges we face today and those which we estimate we will have to contend with in the future. But, associated reductions in force structure diminish the Navy's operational flexibility and impact our ability to meet commitments and respond to contingencies with adequate force. That said, let me address in broad terms my views on the Navy's readiness after the recent round of budget cuts.

Soviet Threat

Deterring the Soviet threat remains a primary challenge for our forward deployed Navy. We cannot permit ourselves to be lulled into complacency by Glasnost and Perestroika, initiatives undertaken by Secretary Gorbachev to rejuvenate the deteriorating Soviet economy. While he faces tremendous odds, we take seriously his determination to succeed. We are also well aware that if he is successful, the military potential of the Soviet Union could be even greater than today. I applaud his commitment to pursue a further relaxation of tensions. In the meantime, we must be careful not to mistake the promise of change with reality, or stated intentions with capabilities. It would be a mistake to shape our defense on the latest pronouncement, enticing proposal, or carefully staged media opportunity.

What are the realities? Since 1981, the Soviets have put to sea six new classes of general purpose submarines, four new classes of surface warships, and three new types of naval aircraft. Today, they are building new large deck aircraft carriers and sufficient surface combatants to eventually allow them to take modern tactical aircraft to sea. This new capability will be in addition to their four Kiev class carriers already fully operational at sea. Despite all the publicity about Soviet force reductions, the observable facts are that Soviet naval modernization continues unabated while they merely remove old and non-cost effective units from their inventory.

Over the past several years, under Secretary Gorbachev's leadership, we have heard a wide variety of arms control proposals from the Soviets. Extension of these proposals into naval arms control could have serious consequences. First, such efforts could jeopardize our ability to exercise sea control, maintain the sea lines of communication, and to resupply Europe in the event of war. And second, they could reduce the defense burden on the Soviets by weakening our ability to use our competitive advantage -- the mobility, flexibility and power projection capabilities of our naval forces -- in defense of allies, such as Norway, Greece, Turkey, Japan, and Korea, located proximate to the Soviet Union. Naval arms limitations could make the defense of these "flank allies" less credible.

In this context, the Conference on Armed Forces in Europe (CFE) talks have begun. It seems likely that the Soviets will argue that the elimination of their asymmetrical advantages in ground forces must be matched by elimination of such NATO advantages as superior naval and air power. While this has a seductive appeal at first glance, it seeks to downplay the reality of geography. Because they share the continent with Western Europe, the Soviets will always maintain the ability to quickly regenerate forces from the East. NATO must therefore maintain a countervailing force from the West, which must ultimately come via sea and air from North America. This requires NATO control of the seas to ensure a credible defense of Western Europe; thereby guaranteeing a stable, balanced Europe. The ultimate threat to a nation's sovereignty is territorial occupation, which can only be accomplished by armies. It seems clear that the CFE talks should continue to focus on land force asymmetries, which, in my view, pose the greatest threat to European

Security. As Admiral Crowe recently testified before the House Armed Services Committee, " . . . the most glaring weakness in our global posture is our inability to adequately defend Western Europe conventionally."

I am particularly mindful of Soviet submarine capabilities, and thus our own antisubmarine warfare efforts remain my top warfighting priority. The new SSN-21 Seawolf attack submarines and the Long Range Air ASW Capability Aircraft (LRAACA) are the essential next generation of ASW forces. ASW is a force structure intensive problem. There are no silver bullets or easy pat answers to ASW. Nor is there a technical breakthrough on the horizon to make ASW simple. The combined efforts of all our ASW forces -- surveillance systems, attack submarines, ASW aircraft and helicopters, and surface combatants -- are needed to defeat a large submarine threat. To succeed at ASW you have to do it the old fashioned way; work hard, keep the pressure on enemy submarines in their home waters, and combine all the forces at your disposal. Numbers and capability make the difference in ASW -- a lesson we learned in World War II that remains valid today.

Strategic Linkages

With respect to the key linkages between our national security strategy, our operational requirements, and the Navy's authorization request, our national security interests require the use or control of the oceans and seas that separate us from Europe, Asia, and South America, as well as two of our own states. As a maritime nation and the leader of the free world we must maintain sufficient naval forces to ensure conventional deterrence, forward defense, and alliance solidarity. In addition to the threat of the Soviet Union, we face a growing challenge in the Third World. Proliferation of advanced technology weapons, reduced availability of overseas bases, and the increased threat of terrorist activities will likely place added demands on U.S. naval forces in support of U.S. national interests.

In the Pacific we are committed by treaty to the territorial integrity of Japan and by another agreement to peace and stability on the Korean peninsula. As a member of the North Atlantic Alliance, the United States is pledged to defend the Atlantic and Mediterranean. Throughout Southeast Asia, the Persian Gulf and the Indian Ocean, we are committed to ensuring the stability necessary for free access to raw materials and commerce.

These broad national security interests define the global scope of our national security strategy which depends on a commitment to maritime superiority. A credible forward deployed naval presence is essential to regional stability - for our allies as well as to ensure our continued access to foreign sources of supply.

Ability to Satisfy CINC Requirements

A 600 ship force level to remains the right size Navy to execute the maritime element of the national strategy with likely assurance of success. Force structure goals must relate to the estimate of our ability to prevail in conflict, and approximately 600 ships represents the collective requirements of the maritime CINCs to meet their commitments with an acceptable degree of risk.

I recognize that achieving a force level of 600 ships will not occur in the near term because of other national fiscal priorities. Although budget reductions driven by the federal deficit have prevented us from obtaining these force levels, only the possibility of a less threatening Soviet Union makes this delay acceptable. We must ensure that their words are matched by actions.

The decision to early retire Coral Sea (CV-43) and equivalent supporting combatant force levels when Abraham Lincoln (CV-72) is commissioned will maintain our deployable carrier battle forces at today's level of fourteen. This means we will continue to experience a shortfall in satisfying our existing overseas commitments in the Mediterranean and Indian Ocean. Secretary Cheney has stated up front that we will not attempt to do more with less. The United States Navy, our sailors and their families deeply appreciate his commitment to our policy of a minimum of one year in home waters between six month overseas deployments. Continuation of this policy is essential to ensure that our sailors and their families do not pay the price with increased separations and longer deployments for not having achieved our minimum carrier force level goal.

Further, with the early retirement of antiair warfare capable surface combatants (DDG-2/DDG-37 classes) and the unscheduled transfer of 24 ASW combatants (FF-1052 class) to the reserve force, the number of surface combatants per battle group will decrease. That means that today's battle groups will deploy with fewer surface combatants and will be less capable than I and our combatant commanders would like under most regional theater scenarios we face.

In the event of a contingency or other national requirement to employ naval forces, those deployed battle groups may require augmentation by unscheduled deployments of CONUS-based surface combatants. The burden of unscheduled deployments falls not just on the ships, but on the men and women who man them and the families who support them. Ensuring that our outstanding Navy men and women do not become overextended at sea is a priority on which Secretary Cheney, Admiral Crowe, Secretary-designate Garrett and I are in complete agreement.

Assessment

Implementing these force level decisions will result in fewer deployable surface combatants available for tasking, either in company with carrier battle groups or individually in places like the Persian Gulf or in the Caribbean in response to drug interdiction taskings, until the **Arleigh Burke** (DDG-31) class begins to accumulate in sufficient numbers, about 1995. In the intervening time, the Navy will be there -- but with a diminished margin of flexibility, when viewed against the real world high technology threat. In that regard, the proliferation of capable tactical aircraft, cruise missiles and diesel submarines throughout the world, often in proximity to regional "hot spots," will still require us to meet the threat with sufficient force levels to prevail in any engagement.

While I have understandable reservations about the size of our force level cuts, a sustained reduction in tension between the superpowers should permit us to make prudent adjustments in our deployment schedules and to undertake a level of risk which we might otherwise have found unacceptable. But let me offer this cautionary observation. Essential to this process is the national commitment to deliver the increased combatant capabilities of the Arleigh Burke class DDGs and downstream CVNs on schedule.

It is within this same context that I view this budget's reduced aircraft procurement to 140 in FY 90 and 193 in FY 91. As you know, the budget terminated F-14D new construction; reduced F/A-18 by 6 per year; added to the CH-53E program; terminated V-22; eliminated FY 90 SH-60F purchases; and dropped 24 T-45 aircraft from both FY 90 and FY 91. It will also early retire 73 older P-3A/B aircraft. To meet VP ASW deployment requirements and maintain operational squadron integrity we will compensate for this reduction in number of aircraft by reducing the number of P-3s in the active squadrons from 9 to 8 and in the reserve squadrons from 9 to 6; or reduce the number of reserve squadrons to ensure that each squadron is of sufficient size to meet realistic requirements.

We are currently maintaining a force mix of 13 active and 2 reserve tactical air wings, with 24 active and 13 reserve ASW patrol squadrons. These budget actions increase the significance of keeping the A-12 and LRAACA on schedule.

Similarly, the decision to eliminate one of the final **Los Angeles** class nuclear attack submarines and close out procurement of this superb multi-mission warship with a total Of 62 purchased means that the SSN-21 program must be kept on track.

On balance, however, it is important to say that the United States Navy remains, after these cuts, a most capable smaller force. These changes are not insignificant and will require substantial adjustments to the deployed force levels and number of commitments that can be routinely met. We have made a sober assessment of where we are going and what steps we must take to get there. The Navy program remains in balance.

Future Priorities

To prepare us to meet the future, I have three overarching priorities that pervade all other issues:

First, our people: They clearly make the difference and the quality of our people will provide the winning margin in any conflict. We need to be able to continue to attract and retain the enthusiastic, patriotic, bright, and incredibly hard working men and women that are the Navy of today. In this regard, we appreciate the support by the 100th Congress on many of the issues affecting our people and look forward to continued efforts to ensure a decent quality of life for our sailors. Our people accept an arduous life style, make tremendous sacrifices, work long hours, and ask for very little in return. Today, despite the recent pay increase, the disparity between the Employment Cost Index and military pay stands at 10.1 percent. I urge this Congress to recognize and seek to close this gap, and provide support to programs to reduce the drastic shortages of affordable military housing, and improve access to quality medical care, as well as continue to meet the need for morale, welfare, and recreation enhancements that communicate in a visible way our commitment to the quality of life of our people.

Second, maintaining a balanced and effective naval warfighting capability: Since World War II, Naval forces have been a principal instrument of our crisis response in 80 percent of over two hundred separate incidents. We are called first and deploy the farthest -- and in today's environment of weapons proliferation, we can expect to face sophisticated, well-equipped opposition even in Third World scenarios. Maintaining the balanced capability required to respond and win in a wide variety of demanding potential scenarios is my overarching priority. This means having a Navy that is properly manned and equipped to win across the spectrum from low intensity conflict to a global war -- should deterrence fail. It also means having a Navy that is flexible enough with sufficient force levels to achieve our national objectives as a maritime power and leader of the free world, depending as we do on sea lines of communication for the quality of life of our people and freedom itself.

Third, achieving required future capability: We must look to the future as we allocate resources today, wisely planting the seedcorn of research, development, test and evaluation. This will include incorporating key advances in advanced antisubmarine warfare technologies, lowobservability, electric drive propulsion, command and control systems, long range cruise missiles, and space systems.

In closing, I would like to highlight the role of the United States as the leader of a global maritime coalition, a group of free nations linked by our common belief in freedom of the seas, a dependence on sea lines of communication, and a shared requirement for maritime defense. In this era of increased emphasis on burden-sharing, it is important to note the contributions many of our allies and friends who form this maritime coalition make to our mutual security interests. Through mutual security efforts undertaken with our coalition partners, the U.S. Navy is able to maintain a forward deployed presence that makes a significant contribution to stability in many regions of unrest. As we saw in the Persian Gulf, U.S. leadership is often the catalyst that draws our allies and friends into supporting roles during crisis. This fundamental role, providing leadership and peace through strength, is at the heart of our Navy's mission today and in the future. My assessment is that today we are good -- ready to fight and win at sea. It is a fact of life that our Navy will continue to be the force of choice in the real world. With your support, we will be ready when called upon to serve our national interest on distant seas wherever and whenever required.

Chairman **Nunn**. Thank you, Admiral. I agree with you 100 percent on the lack of stability. I think it is one of the most wasteful practices we have in the military. We concentrate on all the fraud, waste and abuse, as we should because it is something that we cannot tolerate in defense or any other part of government, but the biggest waste is not being able to plan ahead.

We have tried our best to get a 2-year budget, and the Defense Department has tried. But it is sort of over the paygrade levels of both of us until there is a 2-year agreement between the President and the leadership of the Congress including the Budget Committee.

We are going to try again this year to have as much as possible authorized for 2 years. Now the appropriators, we have not made a lot of progress on that line, but it is awfully hard, if not impossible, to get 2-year commitments on the floor of the Senate on defense issues if we have not been able to get any kind of agreement on other budget matters.

The other thing that you may not have picked up from yesterday's hearing is that I invited Secretary Cheney to come back with a list of programs for what I would call pilot project prototypes or whatever you would like to call them, where I would like to see—and I am speaking only for myself, I have no way of knowing what others think on this—like us waive a lot of the rules and regulations that encumber the procurement process and put some of these procurement programs on a fast track, where we know there is stability and where we know there is general consensus.

And also the milestone authorization process where we begin to authorize beyond simply 1 year, but we authorize on programs where there is general consensus, the research stage or the development stage or the advanced procurement stage, so we do not have to readdress these things each year. I think we definitely need to move in that direction, and I believe there is receptiveness, but we are not going to be able to do it with all the programs. We are going to have to find those with more stability and less controversy. Otherwise, you cannot get 2-year commitments.

But I did make that general invitation to Secretary Cheney, and I would also pass it on to each one of you because I would like to see if we cannot advise ways to improve the process, even knowing that until we get a larger framework for the budget, we are not going to be able to do much long-range planning.

But I think your point is very well taken.

General Welch.

STATEMENT OF GEN. LARRY D. WELCH, CHIEF OF STAFF, U.S. AIR FORCE

General **Welch**. Thank you, Mr. Chairman and members of the committee. You have accepted my statement for the record, and so I would just like to spend just a few moments summarizing some key points in response to the specific letter you sent inviting me to testify.

Like my Naval colleague, I will forego the strategic scene setting. We still face the full spectrum of threats, with the Soviet Union dwarfing all others, and consequently I will move directly to capabilities and shortfalls. But I think at the outset, it is useful to put all of the rest in context by reminding all that we are in our 13th year of significant modernization. We are in our 9th year of very intense focus on readiness, and we have been focusing on quality people for much longer than that. And as a consequence of that focus and the support of this committee, we have fielded today a highly effective combat-ready Air Force.

So we start from that point as I address our shortfalls and our capabilities. Clearly, the continuing budget cuts are an inevitable fact, but to understand those impacts, we have to look both backwards and forwards from the single budget year. The Air Force approach to dealing with these budget cuts has been to maintain a balance that is readiness today, the modernization that provides for readiness tomorrow and reasonably adequate force structure. To maintain that balance, we have found it necessary over the past 3 years to reduce manpower by 37,000 people in the Air Force. And when we complete all the force structure areas now underway, we will have reduced the Air Force by 33 squadrons of aircraft of all kinds. So we have been through some fairly drastic force structure revisions in coping with past budget cuts.

This budget request addresses some continuing shortfalls and capabilities in key areas. For example, we have been virtually stalemated in completing the strategic ICBM modernization program. The stalemate has been caused by an inability to reach any kind of consensus on how we go about fielding the much needed land based mobile ICBM capability in this country. It is our hope that this budget provides at least a basis for a consensus to get on with this strategic modernization program.

The budget calls for rebasing the first 50 Peacekeepers into the rail garrison mode and continues development of the Small ICBM for deployment later in the 1990s. For the bomber force, we are asking for the funds to complete the base line for the B–1 and to incorporate some new communications capabilities and some new weapons capabilities into the aircraft that will be incorporated into other bombers.

The B–1 can hold most Soviet targets at risk today, and by completing the revised ECM Plan and the other capabilities it will serve that purpose for years to come. I have regularly reported to this committee and other interested committees that the development of the B–2 has taken somewhat longer than originally planned, with a concurrent increase in development cost. This budget recognizes those facts of life, and modifies the B–2 schedule. I continue to believe, however, that deliberate pace driven by performance milestones rather than the calendar is the best way to field the right aircraft at the right time, the B–2 is the right aircraft.

For the conventional forces, our greatest shortfall clearly is underwriting all the theatre strategies with adequate strategic airlift capability. While we have made very significant progress, in fact, we have about doubled that capability since the beginning of this decade, the C–17 remains the only viable approach to filling that requirement.

To support the airland battle, the Army and the Air Force have since 1982 been intensely focused on defining and acquiring the necessary capability to provide close air support and effective battlefield air interdiction across the globe wherever it is needed. In doing this, we have examined 28 aircraft designs, ranging all the way from modifications to existing aircraft to new Stealth designs that will be available sometime after the turn of the century. Nonetheless, we have not been able to forge the consensus required to get on with fielding a new close air support airplane to perform that vital function.

We do have some progress this year. This budget contains the funds to upgrade three wings of A-10s, to do a better job of the near-term support of the close-in battle and longer term, low-intensity conflict applications. And it also provides the funds to modify two wings of F-16s so they are more specifically configured for those missions. And we would hope that as the year progresses, through the Defense Acquisition Board process, we will finally be able to define a new close air support airplane.

Let me say the Air Force and the Army are totally committed to that, and we are more than a little frustrated at our inability to build the kind of consensus needed outside the Air Force and the Army. For the longer term interdiction mission, we look forward to the Navy and Air Force Advance Tactical Aircraft, and that program proceeds on track.

In the air superiority role, the Advanced Tactical Fighter Program is on track with the first flights early next year, and that also is a vital need. So I think overall Air Force priorities are abundantly apparent from the budget. Quality people, readiness today, modernization to maintain readiness tomorrow, and adequate force structure. No surprise that we have been unable to fully support any of those goals with existing budget levels, but key modernization programs remain reasonably on track at a reduced pace. Quality people programs are very well supported. The intense focus on readiness for the past 9 years will continue. Sustainability, however, is poorly funded in this budget.

I would just close by reminding this committee of something that I realize you do not need to be reminded of, and that is it is the quality of our people that is the key to success. And I urgently request this committee to support those people programs fully.

Thank you, Mr. Chairman. I look forward to discussion.

[The prepared statement of General Welch follows:]

PREPARED STATEMENT OF GEN. LARRY D. WELCH
U.S. AIR FORCE CHIEF OF STAFF, USAF

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE: I WELCOME THE OPPORTUNITY THIS MORNING TO DISCUSS AIR FORCE PROGRAMS AND THE LINKAGE EXTENDING FROM THE NATIONAL MILITARY STRATEGY, TO THE CAPABILITIES REQUIRED TO UNDERWRITE THAT STRATEGY, TO THE PROGRAMS PROVIDING THOSE CAPABILITIES.

THIS COMMITTEE DOES NOT NEED A REVIEW OF THE NATIONAL MILITARY STRATEGY OF DETERRENCE. CONSEQUENTLY, I WILL FOCUS ON NEEDED CAPABILITIES AND FORCE PROGRAMS AND OUR APPROACH TO DEALING WITH DECLINING BUDGETS SINCE 1985. IN DISCUSSING THE CHANGES IN PROGRAMS TO MEET REDUCED BUDGETS, IT IS IMPORTANT THAT WE LOOK BOTH BACKWARDS AND FORWARDS BEYOND THIS BUDGET YEAR.

THE AIR FORCE APPROACH TO THESE BUDGET REDUCTIONS HAS BEEN AND CONTINUES TO BE TO MAINTAIN A BALANCE OF READINESS TODAY, INVESTMENT IN MODERNIZATION TO ENSURE READINESS TOMORROW AND REASONABLY ADEQUATE FORCE STRUCTURE. TO MAINTAIN THAT BALANCE WITHIN INCREASINGLY SEVERE BUDGET CONSTRAINTS, WE FOUND IT NECESSARY, IN THE LAST THREE BUDGETS TO SIGNIFICANTLY REDUCE FORCE STRUCTURE. SPECIFICALLY, IN 1986 THROUGH 1989, WE HAVE REDUCED MANPOWER BY MORE THAN 37000 AND WHEN ONGOING FORCE REDUCTIONS ARE COMPLETED, WE WILL HAVE REDUCED FORCES BY SOME 33 SQUADRONS OF AIRCRAFT OF ALL KINDS. CONSEQUENTLY, YOU WILL NOT SEE FURTHER MAJOR

REDUCTIONS IN THE 1990 BUDGET BEYOND THOSE ALREADY IDENTIFIED IN PREVIOUS BUDGETS.

STRATEGIC DETERRENCE

THE STRATEGY OF DETERRENCE CONTINUES TO DEMAND THAT THE AIR FORCE AND OUR SISTER SERVICES FIELD FORCES ENSURING THAT ANY POTENTIAL ADVERSARY WILL PERCEIVE THAT THE COST OF AGGRESSION OUTWEIGHS ANY GAIN. WHILE THAT STRATEGY EXTENDS ACROSS THE SPECTRUM OF CONFLICT, THE HIGHEST PRIORITY CONTINUES TO BE ON DETERRENCE AT THE STRATEGIC NUCLEAR LEVEL SINCE FAILURE WOULD CARRY SUCH A DISASTROUS PRICETAG.

THAT REQUIRES FORCES THAT MAINTAIN A DAY TO DAY POSTURE PROVIDING ASSURED DETERRENCE OF A SURPRISE ATTACK. IT REQUIRES ADDITIONAL FORCES THAT CAN BE GENERATED IN CRISIS TO ENSURE THAT DETERRENT POWER GROWS FASTER THAN PRESSURES TO ATTACK. AND, IT REQUIRES FORCES THAT LEND THEMSELVES TO CONTROL OF ESCALATION IF DETERRENCE SHOULD FAIL IN CRISIS.

IMPROVEMENTS OVER THE PAST 11 YEARS AND APPROVED PROGRAMS NOW FLOWING INTO THE FORCE PROVIDE HIGH CONFIDENCE DETERRENCE OF SURPRISE ATTACK. THAT REQUIREMENT PLACES A PREMIUM ON FORCES ABLE TO MAINTAIN A HIGH DAY-TO-DAY ALERT POSTURE AT AFFORDABLE COST. SINCE SUCH AN ATTACK IS, BY DEFINITION, IN ABSENCE OF SERIOUS CONFLICT OR CRISIS, THE DECISION TO INITIATE SUCH AN ATTACK WOULD COME FROM A CAREFUL, DELIBERATE ASSESSMENT OF THE RISKS VERSUS THE GAINS. ANY RATIONAL DECISION MAKER WOULD CONCLUDE THAT CURRENT AND PROGRAMMED FORCES WILL MAKE THE RISK FAR OUTWEIGH

ANY POSSIBLE GAIN.

o PLANNED FORCE PROGRAMS WILL CONTINUE TO IMPROVE DAY TO DAY DETERRENCE AND, OF MORE IMPORTANCE, WILL PROVIDE GREATLY INCREASED STABILITY IN CRISIS. ONCE GENERATED AND DISPERSED, THOSE FORCES MUST BE CAPABLE OF EXTENDED ALERT WHILE MAINTAINING EFFECTIVENESS. CONTINUING IMPROVEMENTS IN THE BOMBER FORCE, THE NEAR TERM DEPLOYMENT OF THE TRIDENT II/D-5, MOVING SILO BASED PEACEKEEPER ICBMs TO RAIL GARRISON AND CONTINUED DEVELOPMENT OF THE SMALL ICBM PROVIDES A TRIAD OF FORCES THAT CAN QUICKLY INCREASE ALERT FORCES DISPERSED FOR ENDURING SURVIVABILITY IN CRISIS. HENCE, THOSE FORCES BECOME MORE STABILIZING IN CRISIS.

FOR LAND BASED ICBMs, THE GOAL HAS LONG BEEN TO MODERNIZE THE FORCE BY UPGRADING THE MINUTEMAN, DEPLOYING MODERN WARHEADS ON PEACEKEEPER MISSILES AND ON SMALL ICBMs. TO DATE, WE HAVE UPGRADED THE MINUTEMAN, IMPROVING ITS ACCURACY BY ABOUT 50%, AND HAVE DEPLOYED 50 SILO-BASED PEACEKEEPER MISSILES. THESE IMPROVEMENTS HAVE DRAMATICALLY IMPROVED THE DETERRENT EFFECTIVENESS OF THIS LEG OF THE TRIAD BUT WITH ONLY A FRACTION OF THE PLANNED CAPABILITY.

AS THIS COMMITTEE IS WELL AWARE, WE HAVE BEEN VIRTUALLY STALEMATED IN CONTINUING THE MODERNIZATION OF THIS LEG OF THE TRIAD BY INABILITY TO REACH A CONSENSUS ON PEACEKEEPER BASING AND SMALL ICBM DEVELOPMENT AND DEPLOYMENT. THE ORIGINAL GOAL IN THE 1970s WAS TO DEPLOY 2000 MODERN, HIGH QUALITY WARHEADS. THE SCOWCROFT COMMISSION WORK RESULTED IN LOWERING THAT GOAL TO 1500 SUCH WARHEADS - 1000 ON

PEACEKEEPER AND 500 ON SMALL ICBM. THE BUDGET BEFORE YOU NOW ACCEPTS A FURTHER REDUCTION IN THAT OVERALL GOAL.

THE PROPOSED PROGRAM IN THIS BUDGET PROVIDES THE BASIS FOR A CONSENSUS ON MUCH NEEDED FURTHER PROGRESS IN ICBM MODERNIZATION, FOCUSED HEAVILY ON CRISIS STABILITY AND ESCALATION CONTROL. THE MOST IMMEDIATELY AVAILABLE IMPROVEMENT AND THEREFORE THE FIRST PRIORITY REMAINS THE IMPROVED FLEXIBILITY AND ADDED STABILITY IN CRISIS PROVIDED BY REBASING PEACEKEEPER IN THE RAIL GARRISON MODE. THE PROGRAM ALSO CALLS FOR CONTINUED DEVELOPMENT OF THE SMALL ICBM FOR DEPLOYMENT IN THE LATE 1990s, ADDING TO THIS LEG THE ADDED SURVIVABILITY AND OPERATIONAL FLEXIBILITY INHERENT IN SINGLE-WARHEAD MISSILES. TO ENHANCE DETERRENCE, ENSURE STABILITY AND FACILITATE ARMS REDUCTIONS, WE NEED TO MOVE AHEAD WITH BOTH PROGRAMS.

THE AIR FORCE GOAL FOR THE BOMBER FORCE CONTINUES TO BE ROUGHLY 340 MODERNIZED NUCLEAR-CAPABLE HEAVY BOMBERS AVAILABLE FOR MULTIPLE MISSIONS AND A MUCH SMALLER FORCE OF OLDER B-52Gs RETAINED FOR CONVENTIONAL OPERATIONS. THE UPGRADED B-52 WILL SERVE WELL IN THE CRUISE MISSILE CARRIER ROLE FOR AT LEAST ANOTHER DECADE. THE B-1 CAN HOLD MOST SOVIET TARGETS AT RISK TODAY, AND WITH PLANNED UPGRADES WILL COVER MANY TARGETS FOR YEARS TO COME. THE RAPID DEVELOPMENT AND DEPLOYMENT OF THE B-1 PROVIDED A TIMELY ADDITION TO OUR DETERRENT CAPABILITY AND GAVE US THE BREATHING SPACE NEEDED FOR ORDERLY DEVELOPMENT OF THE B-2. THE B-2 WILL PROVIDE THE LONG TERM

CAPABILITY TO EFFICIENTLY COVER A WIDE SPECTRUM OF TARGETS TO INCLUDE THE HARDEST TARGETS AND HEAVILY DEFENDED TARGETS.

AS I HAVE REGULARLY REPORTED TO THIS AND OTHER INTERESTED CONGRESSIONAL COMMITTEES, THE DEVELOPMENT OF THE B-2 HAS TAKEN SOMEWHAT LONGER THAN ORIGINALLY PLANNED WITH A CONCURRENT INCREASE IN DEVELOPMENT COST. THIS BUDGET REFLECTS THE REALITY OF THE LONGER DEVELOPMENT TIME. NONETHELESS, I BELIEVE THE DELIBERATE PACE, DRIVEN PRIMARILY BY PROGRAM PERFORMANCE MILESTONES RATHER THAN CALENDAR DATES IS THE PATH TO FIELDING THE RIGHT AIRCRAFT AT THE RIGHT TIME. TO KEEP THE DEPLOYMENT TIMING IN CONTEXT, IT IS IMPORTANT TO NOTE THAT THE AIRCRAFT WILL SERVE FOR 30 YEARS OR MORE, SO IT IS MORE IMPORTANT THAT WE FIELD AN AIRCRAFT THAT IS RELIABLE, MAINTAINABLE AND ADAPTABLE TO FUTURE DEMANDS. I WOULD REMIND ALL THAT THE NEWEST B-52 IS 27 YEARS OLD. BOMBERS, LIKE OTHER STRATEGIC NUCLEAR SYSTEMS ARE DESIGNED AND BUILT FOR LONG YEARS OF SERVICE.

THEATER FORCES

THE THEATER LEVEL STRATEGY CALLS FOR FORWARD BASED FORCES AND RAPID REINFORCEMENT CAPABILITY. THE FLEXIBLE RESPONSE STRATEGY DEMANDS THAT THOSE FORCES BE CAPABLE OF BOTH THEATER NUCLEAR OPERATIONS, AND EFFECTIVE OPERATIONS AT THE CONVENTIONAL LEVEL.

FOR THE THEATER NUCLEAR ROLE, FIELDING THE F-15E, UPGRADING THE F-111 FORCE, AND NIGHT/ADVERSE WEATHER CAPABILITY FOR THE F-16 FORCE WERE NEEDED, REQUESTED, FUNDED AND WELL UNDERWAY BEFORE THE SIGNING OF THE

INF TREATY. ELIMINATION OF THE PERSHING II AND THE GLCM SIMPLY MAKES IT EVEN MORE IMPORTANT THAT THESE AND OTHER THEATER NUCLEAR PROGRAMS STAY ON TRACK.

FOR CONVENTIONAL FORCES, OUR HIGHEST THEATER FORCES PRIORITY IS IMPROVING STRATEGIC AIRLIFT CAPABILITY. THAT CAPABILITY IS ESSENTIAL TO THE FORWARD DEFENSE AND RAPID REINFORCEMENT STRATEGY. THAT NEED HAS DRIVEN A SERIES OF AIR FORCE PROGRAMS INCLUDING UPGRADES TO CURRENT AIRLIFT SYSTEMS, EXPANSION OF THE C-5 AND THE KC-10 FLEETS, AND CRAF ENHANCEMENT. BUT THE C-17 REMAINS THE CORNERSTONE OF OUR EFFORTS TO FILL THIS REQUIREMENT.

ONCE DEPLOYED TO THE BATTLE AREA, SUPPORT OF THE AIR-LAND BATTLE REQUIRES THE FULL SPECTRUM OF HIGHLY FLEXIBLE TACTICAL SUPPORT CAPABILITIES.

THE ARMY AND THE AIR FORCE HAVE, SINCE, 1981, BEEN INTENSELY FOCUSED ON DEFINING AND ACQUIRING THE CAPABILITIES NEEDED TO PROVIDE EFFECTIVE CLOSE AIR SUPPORT AND BATTLEFIELD AIR INTERDICTION ACROSS THE THEATER, FROM THE CLOSE IN BATTLE AT THE POINT OF CONTACT TO THE DEEP BATTLE. THE ARMY AND THE AIR FORCE HAVE REACHED COMPLETE AGREEMENT ON THE REQUIREMENTS AND THE GENERAL NATURE OF THE EQUIPMENT NEEDED TO FILL THE REQUIREMENT. HOWEVER, WE HAVE BEEN FRUSTRATED BY THE GREAT DIFFICULTY IN FORGING THE CONSENSUS NEEDED AMONG THE MANY OTHER PLAYERS ON THE WASHINGTON SCENE TO MOVE FORWARD TO SATISFY THIS IMPORTANT REQUIREMENT. IN THIS PAST YEAR, WE HAVE EXAMINED 28 AIRCRAFT DESIGNS SPECIALIZED FOR THIS MISSION, RANGING FROM MODIFICATIONS TO EXISTING DESIGNS

TO NEW, STEALTH DESIGNS THAT COULD BE AVAILABLE BEYOND THE TURN OF THE CENTURY. THAT WORK CONTINUES.

BUT, WE HAVE SOME WELCOME PROGRESS. THE BUDGET CONTAINS THE FUNDS NEEDED TO UPGRADE THREE WINGS OF A-10s FOR CONTINUING USE FOR THE CLOSE IN BATTLE AND FOR LONGER TERM USE AS LOW INTENSITY CONFLICT AIRCRAFT AND AS FORWARD AIR CONTROL PLATFORMS. THE BUDGET ALSO CONTAINS FUNDS TO UPGRADE TWO WINGS OF F-16s TO A CONFIGURATION MORE SPECIALIZED FOR THE CAS AND BAI ROLES. THE DECISION ON ACQUIRING NEW A-16s, SPECIALIZED FOR THIS ROLE, WILL BE APPROACHED THROUGH THE DEFENSE ACQUISITION BOARD PROCESS. HOPEFULLY, WE WILL BE ABLE TO REPORT PROGRESS ON THAT FRONT AS WE MOVE THROUGH THE YEAR.

FOR THE DEEPER INTERDICTION AND AIRFIELD ATTACK ROLE, THE F-15E, F-16s WITH NIGHT CAPABILITY AND UPGRADED F-111s WILL SERVE IN THE NEAR TERM. FOR THE LONGER TERM, THE AIR FORCE IS LOOKING FORWARD TO THE JOINT NAVY/AIR FORCE ADVANCED TACTICAL AIRCRAFT.

TO PROVIDE THE FREEDOM OF ACTION NEEDED TO PROVIDE EFFECTIVE AIR SUPPORT TO LAND AND MARITIME OPERATIONS, CONTINUED UPGRADES TO F-15 AND F-16 AVIONICS AND ENGINES, CONTINUED BUILD UP OF THE AIR TO AIR MISSILES INVENTORY AND DEPLOYING THE AMRAAM MISSILE WILL ADD SIGNIFICANTLY TO THIS MISSION. FOR THE LONGER TERM, THE GROWING FORCE OF SOVIET LOOK-DOWN, SHOOT-DOWN AIRCRAFT WILL DEMAND THE CAPABILITIES OF THE ADVANCED TACTICAL FIGHTER. IT IS MOVING FORWARD IN THE DEMONSTRATION-VALIDATION PHASE AND DEM-VAL AIRCRAFT WILL FLY EARLY NEXT YEAR. THE COMBINATION OF

SUPERSONIC CRUISE, STEALTH TECHNOLOGY, VERY HIGH MANEUVERABILITY, INTEGRATED AVIONICS AND THE AMRAAM MISSILE WILL PROVIDE THE SURVIVABILITY AND LETHALITY NEEDED TO PERFORM THIS MISSION FOR YEARS TO COME.

THE AIR FORCE HAS STRUCTURED THE TACTICAL AIR FORCES TO ACCOMMODATE CONSTANTLY CHANGING BATTLEFIELD SUPPORT NEEDS WITH AN AFFORDABLE MIX OF AIRCRAFT SPECIALIZED FOR SPECIFIC MISSIONS AND MULTIMISSION AIRCRAFT THAT CAN SWING BETWEEN MISSIONS. FOR EXAMPLE, OUR PLAN IS TO MAINTAIN SOME 9 WINGS OF A-10s, SPECIALIZED F-16s AND FOLLOW ON AIRCRAFT FOR CAS. HOWEVER, WE WILL HAVE SOME 22 WINGS THAT CAN BE USED IN THAT ROLE WHEN THE DEMAND IS HIGHEST. SIMILARLY, 5 WINGS OF F-15Es AND F-111s WILL BE SPECIALIZED FOR DEEP INTERDICTION BUT A TOTAL OF 18 WINGS WILL PERFORM THAT MISSION IF NEEDED. A SIMILAR PHILOSOPHY IS USED FOR AIR SUPERIORITY. THE POINT IS THAT IT IS NOT POSSIBLE TO ISOLATE AN AIR SUPERIORITY FORCE OR A CLOSE AIR SUPPORT FORCE FROM THE OVERALL TACTICAL AIR SUPPORT FORCE. THE FORCE MUST BE FLEXIBLE BOTH IN ORGANIZATION AND EQUIPMENT TO MEET THE DAY TO DAY, WEEK TO WEEK CHANGES IN DEMAND AS THE BATTLE UNFOLDS. THE THEATER COMMANDER MUST HAVE AT HIS DISPOSAL TACTICAL AIR FORCES CAPABLE OF SWINGING THE WEIGHT OF EFFORT AT A MOMENT'S NOTICE.

WE HAVE UNDERTAKEN A SERIES OF PROGRAMS TO FILL THESE THEATER REQUIREMENTS. IN PAST APPEARANCES I HAVE REVIEWED THESE SYSTEMS AND THEIR ROLE IN THE THEATER BATTLE. TODAY I WOULD ONLY EMPHASIZE THAT THE CHANGING FISCAL ENVIRONMENT THAT WE HAVE SEEN SINCE INITIATING THOSE PROGRAMS HAS HAD A SERIOUS EFFECT ON THEIR ORDERLY FIELDING, AND ON THE AIR

FORCE'S ABILITY TO SUPPORT THEATER COMMANDERS. TO TAKE ONE CLEAR EXAMPLE, THE DEEP CUTS WE HAVE SUSTAINED HAVE REQUIRED US TO PLAN TO CURTAIL THE F-15E PROGRAM BEFORE THE ATA CAN BE AVAILABLE. THAT IS NOT A DESIRABLE SOLUTION BUT ONE FORCED BY FISCAL CONSTRAINTS. SIMILARLY, WE HAVE LOWERED OUR SIGHTS FROM 40 TFW TO 35 TFW FOR THE FORSEEABLE FUTURE BUT HAVE, THUS FAR, BEEN ABLE TO SUSTAIN THE F-16 PRODUCTION RATE AT A ROBUST, ECONOMICAL RATE.

LOW INTENSITY CONFLICT

IN PAST DISCUSSIONS WITH THIS COMMITTEE I HAVE OUTLINED THE AIR FORCE APPROACH TO SUPPORTING THE REQUIREMENTS OF LOW-LEVEL CONFLICT: A COMBINATION OF SPECIAL OPERATIONS CAPABILITIES AND CONVENTIONAL FORCES THAT CAN BE TAILORED FOR ANY CONTINGENCY FROM COUNTER-TERRORISM TO A MAJOR REGIONAL SITUATION. USAF PROGRAMS HAVE FOCUSED ON RAPID RESPONSE AIRLIFT FOR FORCES OF ALL SERVICES. THOSE PROGRAMS INITIATED OVER THE PAST DECADE ARE NOW REACHING FRUITION -- SPECIALLY EQUIPPED C-141s WITH ESPECIALLY TRAINED CREWS, MC-130s, MH-53 PAVE LOW HELICOPTERS FOR EXAMPLE. HOWEVER, AS YOU ARE AWARE, BUDGET CUTS HAVE FORCED CANCELLATION OF THE CV-22. HENCE, WE WILL HAVE TO CONTINUE TO DEPEND ON IMPROVED MC-130s AND HELICOPTER LIFT FOR THE LONG-RANGE INFILTRATION AND EXFILTRATION MISSIONS.

AIR FORCE PRIORITIES

AIR FORCE PRIORITIES ARE APPARENT FROM OUR EARLIER DISCUSSION: READINESS TODAY, MODERNIZATION TO ENSURE READINESS TOMORROW AND ADEQUATE FORCE STRUCTURE. HOWEVER, WE HAVE BEEN UNABLE, IN THE FACE OF THESE

DEEP CUTS, TO FULLY PROTECT ANY OF THOSE PRIORITIES AND HAVE OPTED FOR BALANCE. FOR EXAMPLE, READINESS IS NOT FULLY FUNDED AND SUSTAINABILITY IS POORLY FUNDED. BUT THE INTENSE FOCUS ON READINESS OF THE PAST NINE YEARS CONTINUES TO BE A HIGH PRIORITY AS WE SHAPE OUR FORCES TO FILL THE DEMANDS OF THE NATIONAL MILITARY STRATEGY. THE HIGH READINESS RATES WE NOW SEE ARE CLEAR EVIDENCE OF THE HEALTH OF THE CURRENT FORCE -- OF THE MORALE AND DEDICATION OF OUR PEOPLE, OF THE STATE OF TRAINING, OF THE QUALITY AND DAILY CONDITION OF THE EQUIPMENT AND THE VERY SUBSTANTIAL IMPROVEMENTS IN INFRASTRUCTURE SUPPORT FOR OUR FIGHTING FORCES. THE QUALITY OF OUR FORCE IS THE KEY TO SUCCESS WITH OUR REDUCED BUDGETS AND REDUCED FORCE SIZE. I URGE THE COMMITTEE TO FULLY SUPPORT THE PEOPLE PROGRAMS, TO INCLUDE ADEQUATE COMPENSATION TO CONTINUE TO ENSURE THAT QUALITY.

THE DECLINE IN DEFENSE SPENDING OVER THE PAST FIVE YEARS HAS ALSO FOCUSED ATTENTION ON THE BALANCE OF MISSIONS BETWEEN THE ACTIVE AIR FORCES AND THE AIR RESERVE COMPONENTS. THIS COMMITTEE IS WELL AWARE OF THE AIR FORCE COMMITMENT TO THE CAPABILITIES OF THE GUARD AND RESERVE, AND THEIR CONTRIBUTION TO THE TOTAL AIR FORCE MISSION. WE HAVE, OVER THE PAST 10 YEARS GREATLY INCREASED THE RESERVE COMPONENT CONTRIBUTION TO THE TOTAL FORCE. WE CONTINUE TO SEARCH FOR EXPANSION OF RESERVE COMPONENT MISSIONS WHERE IT MAKES OPERATIONAL AND FINANCIAL SENSE.

BUT ANY SUCH MOVEMENT MUST BE MADE WITH A CLEAR VIEW OF THE LONG-TERM EFFECTS ON THE ACTIVE FORCES' ABILITY TO EXPERIENCE THE FORCE -- ON THE ABILITY OF OUR

FORCES TO PROVIDE THE RAPID RESPONSIVENESS AND THE FLEXIBILITY DEMANDED BY OUR THEATER COMMANDERS -- AND WITH A CLEAR AND COMPLETE VIEW OF THE FINANCIAL TRADEOFFS OF SUCH A TRANSFER. GIVEN THESE FACTORS, THE BUDGET BEFORE YOU TODAY DOES NOT PROPOSE FURTHER MAJOR SHIFTS OF MISSIONS OR FORCES INTO THE RESERVE COMPONENTS, BUT SUPPORTS CONTINUED MODERNIZATION AND HIGH STATES OF READINESS FOR THOSE FORCES.

IN CONCLUSION, WE HAVE CAREFULLY EXAMINED AIR FORCE PRIORITIES AND PLACED EMPHASIS ON THE PROGRAMS ESSENTIAL TO DETERRENCE ACROSS A RANGE OF RESPONSIBILITIES AND COMMITMENTS. THIS BUDGET REQUEST, CRAFTED IN COORDINATION WITH THEATER COMMANDERS AND THEIR SUPPORTING COMPONENT COMMANDERS, WILL PROVIDE THE UNIFIED AND SPECIFIED COMMANDERS WITH THE BEST AIR SUPPORT ATTAINABLE WITHIN THE RESOURCES AVAILABLE.

BUT IMPLICIT THROUGHOUT MY TESTIMONY TODAY WERE THE VERY DIFFICULT CHOICES FORCED BY THIS BUDGET LEVEL. WE HAVE FOCUSED ON OUR HIGHEST PRIORITY NEEDS AND ON MAINTAINING THE READINESS OF EXISTING FORCES WHILE MAINTAINING REASONABLE LEVELS OF INVESTMENT IN THE FUTURE FORCE. THIS PROGRAM IS EXECUTABLE OVER THE NEXT FEW YEARS ONLY IF WE SEE RESOURCES REASONABLY CLOSE TO THOSE PLANNED. THE GUIDANCE FOR THE FIVE YEARS FOLLOWING THE FY 90 BUDGET REDUCES PROJECTED AIR FORCE PROGRAMS ON THE ORDER OF $100 BILLION BELOW THOSE EXPECTED WHEN EARLIER BUDGETS WERE CRAFTED. THERE WOULD BE VERY HIGH INSTABILITY AND RISK ASSOCIATED WITH ANY FURTHER DOWNWARD REVISION OF

RESOURCES DEVOTED TO NATIONAL DEFENSE.

MUCH WORK REMAINS. THE AIR FORCE LOOKS FORWARD TO CONTINUING THE PARTNERSHIP WITH THIS COMMITTEE TO ENSURE THAT THE GAINS WE HAVE ACHIEVED WILL NOT BE SURRENDERED IN THE FUTURE.

I LOOK FORWARD TO YOUR QUESTIONS, AND THE OPPORTUNITY TO DISCUSS THESE MATTERS IN MORE DETAIL.

Chairman NUNN. Thank you very much, General Welch.
General Gray.

STATEMENT OF GEN. ALFRED M. GRAY, JR., COMMANDANT, U.S. MARINE CORPS

General GRAY. Good morning, Mr. Chairman and members of the committee.

Your Marine Corps appreciates the fact that you have entered our statement into the record. We have spent some time with this document in the hopes that it will be of some use in your deliberations. It reflects our views of national strategy, military strategy, the linkage we see with respect to future operational requirements and how we see the future economic strategic environment. In my view, we will have to come to grips with the national deficit and as well as those other pressing challenges the Free world must grapple with.

Rather than go through the prepared statement I would just perhaps proffer a few thoughts for this distinguished group, and in no particular priority. We should be very mindful that no matter what the Soviet Union does in the near term, the midterm or the long term with respect to their "initiatives," I think that the strategies of the United States, NATO and the Free world have proven valid. In my judgment, Mr. Gorbachev and the senior leadership of the Soviet Union have really not done one thing that we have not called for in our strategic deliberations and in our actions over the many years. I also believe that if he completes some of the actions they have been talking so much about since the 27th Congress of the Soviet Union in 1986, they will be a more flexible, more powerful and more streamlined threat to global peace. They are going to stay with Marxism and Leninism and Marshall Akhrameyev reaffirmed that with me when I talked to him this past summer. We need to understand this, as I know the members of this committee do. More importantly, I think as a nation we need to understand that those ideas are deeply embedded in Soviet strategy and Soviet military writings and study.

To give you a few examples of Soviet thinking, when they said that they will not hit us first with nuclear weapons, what they mean is that they will hit us first if they believe a preemptive strike is warranted. So there is a difference in meaning. There is also a difference in many other English and Russian words, and I suggest we be very careful as we move along a trail towards lessening tensions.

They have in the last decade developed a Soviet theory of operations that is aimed towards the perfect blitzkrieg. They learned from all of the lessons of the German maneuvers early in World War II, as well as their own experiences. Although not generally understood, they reaffirmed their own lessons that they applied in operating against the Japanese in 1945 in Manchuria where they moved 900 kilometers in a heartbeat.

What I am saying is that they are trimming back, they are getting rid of what they do not need. They will continue to modernize, field and match us with a better force. Marshall Akhrameyev repeatedly said to me last summer when reviewing our operations at Lejeune, "Your forces are better than ours and your people are better than ours." He said it again when he saw my colleagues and their services at Fort Hood, aboard the Carrier *Roosevelt*, and out West with the Air Force. And, I said to him, I can tell you how to get better: Get rid of half of what you have.

I think you are going to see a very potent military capability emerge, better than the one they have today, if they are successful in carrying out everything that they say. This point should be remembered by those who carry the myopic view towards central Europe which, of course, as you know, I do not. That is but one part of this globe. If we look at what the Marxist/Leninist doctrine teaches, and if we look at what the Soviet Union is doing directly or indirectly around the globe, we have heard nothing about any diminution there. For those who subscribe to the concept that they are taking the threat away and that everything is fine, and we do not have to worry any more, I would like to send up a signal of warning. I repeat what I scribbled on my pad when the Joint Chiefs of Staff met with the Russian leadership last year—"buyers beware."

Even if all goes the way we would like to see it in our utopian view of things, the threats around the globe remain because we are a maritime Nation. It is in this context that I think we must focus our attention.

In the competitive strategies arena, many of our enduring strengths are around the globe and not just in nations with democracy. Our strength lies in what people believe in with respect to the United States. They still see us as a beacon on the hill, if you will, and there are a hell of a lot of people around the globe who want a crack at the idea of being free. I think if we step back from these global responsibilities in this era, we are going to take the first step back with respect to being a second-class nation. If so, you need not worry too much about teaching U.S. history in the middle of the next century, because it will not be very important.

The global threat, the global scene, all that we in the military may be required to do as we try to shoulder our part of the burden with respect to maintaining freedom are not going to change too terribly much in my view. Yet, it is clear that we have to go through this economic, strategic cycle for all the right reasons. Certainly the military services have been doing that, and we have already, as we all know, cut back.

Where does that leave us? It leaves us up on the margin, with not much chance of fewer commitments and deployments. It means that we are going to stretch our forces. It means that we are going to once again be asked to do the impossible; do more with less. And it means that above all we have got to protect the core capabilities that we have built with the solid support of the Congress in the past decade.

I think we probably have to make some skips, if you will. In other words, we have been trying to home in on the kind of forces we think will be needed to enter the next century. We may have to skip some of the heretofore deeply expressed thoughts and requirements and perhaps plan to have the kind of force we need in the year 2000. In doing so we have to up the risk a little bit with respect to 1990 and so on. That is tough to do, particularly when in your Corps of Marines we are expected to be the Nation's expeditionary force in preparedness.

We walk a tricky line in terms of maintaining preparedness, and our ability to sustain ourselves. We form a part of the only real sustained power projection capability that the free world has. We have to balance our training, our operations, our maintenance, our procurement, and our continued efforts to modernize. Above all, I believe that we should always be trying to exploit some technology. Clearly we did that 35 years ago with the helicopter. We have done it with your great support for the AV-8B; and we are attempting to do it in some other areas.

I am somewhat concerned about the term the "Marine Corps' Osprey MV-22." I view that as a national resource and a national requirement. It has enormous commercial potential not only for your Corps of Marines. The MV-22 is most definitely not for only "ferrying" the forces ashore. It goes far beyond that. It offers enormous potential. But, I have to say, and I say it very openly, I support the President and the Secretary of Defense's decision in this arena as well as the rest of the amended budget submission. Our Secretary of Defense had some very tough choices and not a lot of time to make them. I think, based on the information he was given, to include the cost-benefit analysis and along with the military advice, that he made a good decision. I do not agree with the cost advice that he got, nor do I agree with the advice on military operations use and its conceptual framework. But, then, I am one voice, thankfully and prayerfully in this entire operation.

In quick summary, I would say again we should be prudent and practical. We should be careful with respect to how we handle the strategies of the future and how we consider the so-called rushing waves of Soviet initiatives. They are merely the results of our strategy and requirements that we would like to see.

I remember when Marshall Akhrameyev kept saying to me at Camp Lejeune, you can tell your people have grown up in a democratic environment. He said, if I asked Soviet soldiers questions like I am asking your marines, they would not answer. They would look at their boots. He said your people speak right up. Again you can tell they have grown up in a free and democratic environment, obviously one of our enduring strengths. I began to get worried a little bit about what my marines were telling the Soviet leadership. So I saddled up to one of our corporals. I said corporal, come here. I said, you have been talking to these Soviet generals. He said, "yes, sir." I said, what did they ask you. He said, "Well, they asked me what I thought about Soviet leadership being here watching marines and why I thought they were here." And I said, "What the hell did you tell him." And he said, "Well, I told him I was not sure why they were here, but I thought it was a pretty good idea." Now, I think the corporal really captured at least the basic tenent of what I believe our strategy ought to be. We are not really sure how this is going to come out. Is it not a good idea though to have a dialogue and try to reduce tensions with any potential adversary, particularly one who has the power to eliminate or alter mankind on the globe just as we do with our nuclear power.

Finally, it is our nuclear balance that has brought them to the table. It is our strength that has brought them to where they are today. In my view they have lost the cold war economically, and perhaps we are having a little trouble dealing with this victory that we have on our hands. Thank you, Mr. Chairman.

[The prepared statement of General Gray follows:]

STATEMENT OF
GENERAL A. M. GRAY
UNITED STATES MARINE CORPS
COMMANDANT OF THE MARINE CORPS

Mr. Chairman, Members of the Committee

You asked me to appear before you today to provide my views on the changing security environment, the linkage between strategy and operational requirements, and the amended defense authorization request. In this statement, I am pleased to respond to those focused interests and will gladly elaborate on them, and on any other topics you may wish to discuss, during my personal testimony before you.

In your invitation to testify, I particularly noted your emphasis on the linkage between strategy, operational requirements, and defense authorization. I am of the firm conviction that strategy must be the driving force behind operational requirements. Budget decisions must be the direct result of deliberations which have carefully weighed the risk between what is required to achieve our objectives and what is affordable. Any discussion of strategy must always be preceded by a discussion of our interests and the threats to them. My opinion is that our nation's interests and objectives are for the most part enduring. What changes is the threat and the security environment.

The primary threat to our national security environment with which most of us are familiar is changing, vice "going away." The most significant changes have been a direct result of Secretary Gorbachev's initiatives. I believe that his desires for economic and political reform are genuine, and I am encouraged that tensions can be reduced. However, in spite of Glasnost, Perestroika, unilateral arms reductions and professions of defensive doctrine only, one fact remains: the Soviet Union's aim of expanding their influence and form of government throughout the world--continues. The future will see refinements to this threat. As actions taken to improve the Soviet economy continue, if successful, there will likely be an increase in their demand for raw materials and commercial products. There is also a strong likelihood that their requirements will be in competition with our own. In addition, technology will also have an effect on the Soviet's military capability to do the same or more with less.

Our strategy development and resource process is also affected by the widespread perception among the citizens of this country and those of our allies that the Soviet threat is no longer as menacing as it once was. Even with the perceived reduction in the threat of direct confrontation with the Soviets, it is prudent for the United States to proceed with caution, since even with the implementation of their announced unilateral reductions the Soviets will continue to hold a very significant quantitative advantage over NATO in key ground force elements. There is also the possibility that Secretary Gorbachev's reforms might not succeed and that his successor would likely be far more hostile to our interests and those of our allies. In short, our view of Soviet intentions must be measured in terms of their military capability. Accordingly, I am convinced that vibrant US military strength and sound alliances remain key to maintaining US leverage for continued reductions in tensions.

Arms control initiatives offer some promise of reducing the likelihood of a direct U.S. - Soviet conflict. In conducting these negotiations we must have: a desired end linked to our national military strategy and foreign policy, positions that have been discussed with our allies in order to maintain alliance cohesiveness, and accurate verification. In order to maintain deterrence and to achieve success in these negotiations, we must continue to rely on a strong survivable nuclear force and credible conventional forces. In general terms, we believe that at least initially arms reductions should be asymetrical in order to reduce the current level of risk. As reductions are implemented and as the level of risk declines, it should be possible to shift towards symmetrical reductions. In light of changing perceptions and fiscal constraints, the success of arms control negotiations will take a lot of creative thought and ingenuity.

There is no question that the Soviets remain a dangerous threat to our nation. In addition, in the near term, Soviet sponsored or supported instability in the Third World will continue to undermine our interests in these areas. However, we must not become completely focused on the threats posed by the Soviets, since the security environment in which we operate is becoming more complex. The traditional Bi-Polar balance is shifting to one of Multi-Polar relationships and could eventually evolve into one of Poly-Centric dimensions. In the next 10 to 20 years, Japan, China, a collective European community; and other regional powers are likely to emerge as major world powers. Brazil, India,and South Africa may be among these. New alliances are likely to emerge, common threats will be less defined, and unity of action within alliances and trading partnerships will be more difficult to achieve. Competition for resources will be split less evenly between today's super powers, the emerging industrial nations, and increasingly sophisticated Third-World nations. Exploding populations in developing countries and rising nationalism will lead to instability and internal unrest which could threaten our access to resources or our interests in a given region. These threats are not likely to be confined to distant points overseas. We may very well witness the emergence of new threats in the Western Hemisphere. In short, we must continue to plan to counter Soviet challenges to our interest, but we must also begin to plan for a broader range of challenges and or conflicts in the Third World.

Based on the aforementioned security environment, we believe that Mid- and Low - intensity conflict will remain the most likely form of conflict for the United States. The most likely threats to our security will be instability in the Third World countries to include insurgencies, terrorism (both transnational and state sponsored), drug trafficking (narco-terrorism), and rising nationalism. Of particular concern to me is the fact that these threats are compounded by the growing arsenals of these presently lesser powers. These arsenals are steadily growing not only in size but in sophistication. The growing proliferation of high technology weapons to include chemical weapons, conventional long-and short-range weapons,and other sophisticated weapon systems, such as anti-armor, anti-air, and anti-ship guided munitions will affect our ability to protect our interests around the world. The proliferation of high technology weaponry demands that we continue to develop innovative operational concepts, techniques, and equipment needed for the continued flexible military capabilities necessary to respond to likely crises.

Our flexibility to respond to crises around the world is also being adversely affected by the unfavorable long-term trend of the United States to maintain access, including bases and overflight rights, to areas threatened by Soviet and non-Soviet aggression and instability. Rising nationalism and the belief that national sovereignty is compromised when U.S. access is granted has made it increasingly difficult and politically costly, for us to maintain both access and bases in the Third World. For example, in 1948, the U.S. maintained 450 bases overseas; today, we have about 120 and by the turn of the century; we will undoubtedly have less. Although, we may continue to successfully negotiate continued U.S. access to some critical regions of the world, the success of these negotiations is far from certain. Accordingly, it must be realized that the shrinking forward-basing network, coupled with decreasing unity of threat perception and willingness to confront it among our increasingly independent allies, will make our ability to stage and build-up conventional land and air forces for intervention more difficult.

The changing security environment coupled with the proliferation of high technology weapons and our shrinking overseas basing network requires that the U.S. have appropriate forces ready to meet these challenges head-on. In their report, the Presidential Commission for an Integrated Long-Term Strategy made a similar recommendation. Their report states that "the Pentagon must give preference to more mobile and versatile forces -- forces that can deter aggression by their ability to respond rapidly and discriminately to a wide range of attacks." Throughout our Nation's history naval forces -- sailors and Marines -- have been the force - of - choice for such contingencies. Their worldwide reach and inherent strategic mobility, their ability to deploy and operate from sea-bases without the need for overflight rights and foreign continental basing, and their self-contained sustainability makes these forces ideally suited for expeditionary operations. Their unique ability to remain over the horizon and out of sight coupled with their ability to engage and disengage quickly provides the National Command Authorities with the flexibility to control escalation while maintaining a degree of stability in crisis situations. In short, while the global environment may change, sea power remains an enduring constant in our national security strategy. It is and will continue to be America's foremost competitive strategic advantage. To illustrate this point, since World War II, over 260 cases and incidents required the employment of United States armed forces throughout the world. United States Naval forces - aircraft carriers, amphibious ships and Marines - have been the force-of-choice in more than 210 of these occasions. This high usage rate derives from a simple fact: they were there and they were ready.

America is and will remain a maritime nation. Accordingly, we must continue to recognize the need for and the utility of sea power, since it is and will be the primary factor in maintaining our economic health and security. In the future, as in the past, there will be a requirement for forces capable of adapting on short notice to uncertain geographical situations. Multi-mission capable forces, flexibly sized to the mission, possessing the characteristics of speed and mobility will have the greatest utility and, thus, the highest probability of future employment. To quote from language authored by some of your predecessors in this body:

> "American history, recent as well as remote, has fully demonstrated the vital need for the existence of a strong force in readiness. Such a force, versatile and fast moving, and hard-hitting, will constantly have a powerful impact in relation to minor international disturbances -- contingency response. Such a force can prevent the growth of potentially large conflagrations by prompt and vigorous action during the incipient stages. Such a ready force, highly mobile, always at a high state of combat readiness can be in position to hold a full scale aggression at bay while the American Nation mobilizes its vast defense machinery."

These words, recorded in the House Armed Services Committee Report of the 82d Congress were those used to prescribe the structure of your Marine Corps. They have been the blueprint behind the Corps' strategic, operational and program planning efforts, and are the sole reason you have a Marine Corps. Today, in accordance with the language and intent of Congress, your Marine Corps continues to provide such forces. In the words of General Pate, our 21st Commandant, "We are an organization brought into being to meet strategic situations which are peculiar to this insular nation - an organization designed specifically, but not limited to, the short notice expeditionary tasks which have confronted us so often in the past and which will continue in the future." As stipulated by your predecessors, our combined arms organization provides a ready, self-sustaining, integrated, air-ground force to respond to crisis or to war.

As we head into the next century, the unique ability of Marine Corps forces to operate, in conjunction with the Navy, from the sea, independent of overseas bases, host nation support, and overflight rights will be in increased demand. This capability manifested in the form of our carrier task forces and naval expeditionary forces will continue to be the most respected, most responsive, most flexible, and most prepared force capable of reacting immediately without mobilization to project either U.S. influence or power across the entire spectrum of conflict short of a nuclear engagement.

Because our charter is to be an expeditionary force-in-readiness, your Marine Corps continues to focus its efforts on improving our ability to perform a key part of its legislated roles and missions--crisis response. A key part of our mission includes an implicit requirement to continually update our operational concepts and to develop new techniques and equipment needed to perform our mission in light of changing threats and security environments. Historically, the Corps has been able to adapt to changing threats and budget requirements because it has been able to identify, sometimes before these needs were realized or commonly accepted, the operational concepts, equipment, and techniques needed to meet the nation's evolving strategic and tactical requirements. For example, Marines pioneered close air support in the jungles of Central America in the 1920's; before the term "Low Intensity Conflict" existed, Marines published the Small Wars Manual - a publication as applicable today as it was during the 1930's when the concept of lessons learned in the field were being recorded; and they led the way in the development of amphibious concepts, equipment and in the employment of naval gunfire in support of landing forces in 1940; they developed the tactical employment of helicopters in the vertical assault and all weather close air support in the 1950's. Marine Corps contributions in these areas and others have been factors in the success of many US military operations during and since World War II.

In the past eight years, significant improvements have been achieved in force modernization, readiness, and sustainability. Recognizing that threat conditions have changed, we have been working in partnership with the Navy toward an improved ability to project forces from either sea or land bases more rapidly over extended distances. The ability to project power from beyond the horizon, bypassing first line enemy defenses to insert forces deep into inland objectives is an operational maneuver requirement needed to meet the crisis response and warfighting needs of the Nation as we move into the 21st century. We presently conduct amphibious operations from beyond the horizon but the range and speed limitations of our current vertical assault aircraft prevent us from fully exploiting this operational maneuver.

Over-The-Horizon operations provide tactical surprise by dramatically expanding the potential number of areas into which we can project force. The full achievement of this sea-based projection capability is predicated on the development and fielding of modern vertical assault aircraft, surface-effect craft, and assault amphibian vehicles. Combining these developed capabilities with our VSTOL AV-8 Harrier escort and close air support aircraft, we will be able to project over long distances, combat power which would otherwise be reliant on the availability of a friendly base near the objective. Put in a more graphic frame of reference, a naval task force 400 NM off Norfolk, Virginia could project forces inland at any point on a 1,000 mile coastline that stretches from New York to Florida. This range of potential objectives negates an opponent's ability to mass an opposing force against the landing force and would provide an extraordinary crisis response flexibility. Had we possessed such a capability in 1980, Desert One might never have occurred. We would have been able to project forces from sea-bases in the Arabian Sea directly to their final destination. More currently, this capability in our hands today would enable us to project forces for crisis response, evacuations, and combat operations from the central Mediterranean to anywhere on the littoral of the Mediterranean without refueling. Aircraft based in Eastern North Carolina could be projected with a single refueling into Central America and could land not on prepared airfields, but in tactical helicopter landing zones ready for operational employment upon arrival. In the Pacific, forward-deployed forces on Okinawa could conduct air-assault operations directly from bases on the island into tactical landing zones in the Phillipines or Korea.

The end of amphibious operations has been predicted since the end of World War II, but time and time again these predictions have been proven wrong in the Dominican Republic, Inchon, Lebanon, Phnom Penh, Saigon, Mayaquez, Grenada and in the Persian Gulf. Those who make forecasts of such obsolesence are not students of sea power. They recall only the vicious assaults of World War II against seemingly impregnable fortress islands. The reason this Nation conducted such bloody assaults is because we had no other way to project power. Today we do, and with modernization of our forces, we will likely never again need to go into the face of beach fortresses.

The ability of the United States to operate forward-deployed sea bases is both a strategic advantage and a competitive strategy against an adversary with extended coastlines and vulnerable flanks. The floating air bases, artillery battalions, infantry and special operations forces base camps, tank and artillery parks, ammunition dumps, maintenance facilities, hospitals and command, control, communications facilities represented by the aircraft carriers, naval fire support ships, amphibious ships, and Marines of our balanced fleet are a national asset critically important to the future of our nation. Without these sea bases, and the forces they house, and project and sustain when necessary, our nation cannot effectively protect its interests and security in the future, any more than it would have been able to do so in the past. Sea power is essential to the United States of America.

In your invitation to testify, you asked me to address some specific Marine Corps' program budget decisions. I am confident that we can execute the Five Year Defense Program handily in all areas with the possible exception of the Advanced Assault Amphibian (AAA) in the outyears. The effect of the Amended Defense Authorization Request on the AAA has not yet been fully analyzed and I will be happy to forward the results of the analysis as soon as it is complete.

The Marine Corps' balance among the four defense pillars is good. We have maintained a viable force structure while making changes to enhance our warfighting capability. We protected essential Readiness and slowed Sustainability growth. The decision to procure the M1A1 tank in two years (FY90 and FY91) significantly increased the resources applied to the modernization pillar in those years, but there is a return to a more balanced program in the outyears.

Force structure changes have been in the form of adjustments within a constant manpower endstrength. The changes to force structure have all been made to enhance the warfighting capability of our Marine Air Ground Task Forces. The movement of some structure to the Reserves has been to tailor the Corps for efficient operations and training while eliminating from the active structure personnel and equipment which is unlikely to be employed in the early stages of expeditionary operations.

We have made, and are making, adjustments to our modernization plans. The decision to buy the M1A1 tank in two years caused some adjustment, and the cancellation of the MV-22 is causing a reevaluation now. The cancellation of the MV-22 will slow the pace of modernization, reduce our ability to achieve fully the operational concept I outlined earlier, require increased manning for air crews, and restrict our ability to reduce the number and types of aircraft in the inventory as planned. With regard to economical production requirements, we are, for the most part, achieving the most economical production rates. We intend to continue to combine our production rates with those of other Services in order to achieve the desired result. Simply put, we intend to do the most with the resources provided.

I would be remiss if I failed to mention the amphibious lift modernization program. Amphibious force modernization is supported in this budget, however, we will not be able to provide the long standing lift requirements for Marine expeditionary forces until the late 1990s. Amphibious shipbuilding programs must keep pace if this capability is to remain viable. In response to the needs of the combatant commanders our amphibious fleet has improved thanks to the support of the Navy and the Congress, but block obsolescence of older amphibious ships will begin in 1996 unless our efforts to maintain this vital capability continue.

In summary, Mr. Chairman as we move into the next century the changing security environment and fiscal realities will require some hard decisions. The key to success will be ensuring that strategic and operational requirements are the driving force behind program decisions. The global interests of our Nation, the threats posed by both Soviet and non-Soviet adversaries, and the proliferation of high technology weapons demand that we carefully balance operational requirements with budgetary constraints. I recognize that in the short term we are unlikely to have the resources to fund all programs. This entails an acceptance of a level of risk between our requirements and our capabilities. I ask that as you make these decisions, you keep in mind that your Marine Corps has been organized and structured to respond to the types of crises that our Nation is likely to face in the future. Our programs have been and will continue to be based on the need to provide forces capable of responding across the spectrum of conflict. The strength of your Marines has been, is, and will remain our versatility and readiness. The spirit of innovation that has existed in the Corps remains. Marines will continue to search for, develop, and field new operational concepts and equipment that exploit evolving technology to produce more versatile, more capable and more survivable forces. In short, your Marine Corps is ready, today, without mobilization to respond to a wide range of crises. We will continue to stand ready to meet the challenges facing this great Nation, now and in the future.

Chairman NUNN. Thank you very much General Gray. Thank all of you for your testimony. General Gray, let me just start with you.

V-22

It seems to me what you are saying on the V-22 is that you believe Secretary Cheney made the best decision he could make based on faulty information. Am I hearing you correct on that?

General GRAY. No, based on the information he was given by learned people who have their right to believe that they are correct.

Chairman NUNN. But you do not believe they were correct?

General GRAY. No, I do not. But, I had my day in court, as did the Assistant Commandant. So, apparently, your Commandant was not persuasive enough. When we talked about costing and all of that, it is a tricky game. One does not learn all there is to know about that, when he has spent most of his time in the field. However, I am prepared, as I have done with the Secretary of Defense and with others, to submit for the record my view of the cost benefits over the life of the program that I believe weigh very heavily in favor of the MV-22; this is opposed to others in the Department of Defense who know more about this than I do. I do not know much about discounting and all those kinds of things. I have problems with that because I do not have any large cash reserve in the Marine Corps and I do not have that kind of flexibility. I am not from IBM or an organization like that. But, I do know that we made some very careful, well thought through decisions based upon extraordinary analysis. We came to the conclusion that in terms of meeting all of the operational requirements, not only for the Marine Corps but in the whole spectrum of special operations the MV-22 was far superior as an assault helicopter/airplane to replace the aging CH-46 fleet, which is now over 20 years old. We could do more with this aircraft in terms of deployability and rapid operations in not only an amphibious environment but in a low-intensity conflict as well. It would permit us to do multiple thrusts, and to put the finishing touches on our maneuver warfare concepts and ideas. It really was the best way by every form of measurement. We simply could not afford a helicopter-type mix. We could not afford the numbers of helicopters, and we could not afford the ships to carry them or anything else.

We have gotten caught up a little bit ~~in~~ measuring the CH-53E as an assault helicopter and it is not that. It is a heavy hauler logistics helicopter; that is what it was designed to do, and it does that very well. The CH-46 is our assault helicopter that has to be replaced. It is true, you can replace the aging helicopter fleet with new, more modern helicopters. The Blackhawk is a fine helicopter, no question about it. But back in the earlier years when we deliberated about this and looked at it very, very carefully, we recognized from the standpoint of physics, you can only do so much with a helicopter or, for that matter, an auto gyro. You can fix the blades a little better. You can give a little more power, a little more thrust and a little more speed. But, we felt that it was essential to take the quantum step forward and go with the tilt-rotor technology. It would provide the kind of force that we would need in the end of the next decade and certainly in the beginnings of the 21st century.

Chairman NUNN. I am sure there are going to be other questions on that. I want a little bit of my time to ask a couple of others, but we will get back to that one.

U.S.S. "IOWA"

Admiral Trost, let me ask you a question about the *Iowa*. Could you give us the status of the investigation now and to whom you have assigned it, and also when we can expect that to be completed, plus any other information you might have on that.

Admiral TROST. I would be glad to, Senator Nunn. First of all, the investigation itself is headed up by Rear Adm. Rich Millikan, who is a cruiser destroyer group commander and also a former battleship commander. He was previously commanding officer of the *New Jersey*. He is assisted by a team which includes, among other things, an experienced battleship weapons officer as well as a turret officer and then a number of technical experts who could look both at the damage done and what it takes to correct that damage and what might be the possible cause of the explosion.

At this point in time, I have no report from that group, and I do not expect one until they conclude the investigation. As to just what does show in terms of the cause of the explosion, I would expect that to come to us sometime within the next several weeks via the chain of command through the fleet commander.

The only thing that I have at this point in time is that the group who was assessing the damage to determine repairability, determined that we do have at hand both the expertise and the replacement parts to repair that turret, and they are currently in the process of trying to define the exact costs to do so. So we do have a budget level, budget quality recommendation when we make our decision.

Chairman NUNN. Could you tell us how important those big guns are compared to the new cruise missiles that are on board those ships in terms of—and I know they have different missions, it is not the same thing—but in terms of the value of those big guns relative to the ships? Another way of asking the question is if the big guns had not been on the ships and if you had not been able to use those, would you still have brought back those battleships with the cruise missile mission given their structure, size, strength, et cetera?

Admiral TROST. We would probably have done so at that point, and of course I cannot tell you what the thought process would have been for those who made those decisions, but they would undoubtedly have been swayed by the capability of the ship to survive in literally any environment short of a nuclear blast, and their ability to serve as platforms for large numbers of missiles.

At one point in time we looked, for example, at markedly increasing the number of cruise missiles that could be carried by these ships. We discounted that simply because we did not want to give up the capability of those guns which are useful, extremely useful, in providing shore bombardment and in operating in areas such as the Strait of Hormuz in the Persian Gulf as they have in the recent past.

The guns at that point in time were considered extremely significant because the ship itself could steam literally in harm's way and within the range arc of the Silkworm missiles without fear really of having much more damage done to it than sort of denting its superstructure, if you will.

The ship itself certainly was not threatened. It could at the same time have used those guns to eliminate those missiles. Those guns could have been used to eliminate almost any other threat within their range in the gulf had they been called upon to do so. So they do, in fact, provide a very creditable presence in a situation such as that. Had the guns not been available, the ships might not have had quite the support to bring them back into operation, unless we had markedly increased the load of cruise missiles on board.

Chairman NUNN. What would be your load of cruise missiles on board that ship? And I do not want a classified number but just generally speaking.

Admiral TROST. The number is not classified. The current capability is 32 Tomahawk cruise missiles of any variant of that missile available, plus 16 Harpoon cruise missiles. What this does is give it a rather potent long-range anti-ship capability as well as the capability to strike shore targets deep inland if necessary.

Chairman NUNN. The point is the guns are important, but then they are not the only thing; there are other important striking weapons on that ship.

Admiral TROST. What is important in my view is the net capability of a highly survivable platform, with a mix of weapons that are highly capable.

Chairman NUNN. My time has expired. Senator Lott.

Senator LOTT. I will be brief, Mr. Chairman, but I would like to say I appreciate the testimony. And I must say that you are very convincing to me, as guarded as you were in your remarks about the MV-22. But I will leave most of the questions or comments on that to my colleague here from Indiana.

NATIONAL GUARD AND RESERVES

General, I am particularly interested in the Army and your total force plans, the importance of the National Guard and the Reserves. I know that you are committed to that, but I am concerned about some of the things in the defense budget. For instance, I understand that there would be some diminution of the Apache helicopters for the National Guard and an effort to get the LHX, as I understand it. And I believe that the National Guard people are very much concerned about that. That is going to affect their capability and their role as a part of the total force. How do you respond to that?

General VUONO. Well, so am I, Senator. As you know, it was a matter of affordability. We have an aviation modernization plan which we are adhering to, and we had to adjust that plan, based upon resources available to us in the amended budget we submitted. As I said in my opening statement, it is a balance between near-term capabilities and shaping the future. Therefore, we elected to reduce the Apache from 975, which would have been our total buy down to 807. In order to do that, we had to reduce the number of battalions that we could field.

And so we reduced them, some out of the Active and some out of the Army Reserve components.

Senator LOTT. Were they not disproportionately reduced?

General VUONO. No, I believe it was the right proportion based upon the first to fight in worldwide commitments. We still will have 40 Apache battalions even with that reduction. Although we did not like to do that, it was our judgment that it was a prudent decision in order to maintain that balance between near-term capability and the future to correct a battlefield deficiency that we have and that we need to reduce, and that is the deficiency that the LHX will take care of within the Scout/Attack role.

AMMUNITION FACILITIES

Senator LOTT. Well, I want to get a lot more information on that, because I am concerned, and I am not convinced.

You know, General, I think one of the things that hurts our ability to get what you need for the present and the future, is some of the things that you have done in the past, or even the recent past.

I know, for instance, where you have spent—the Army has spent $600 million over the past 10 years for the country's most modern ammunition facility—the only one built since World War II. And the plans now are to, in effect, lay it aside and mothball it.

And to the local people involved, and the American people—now, it is pretty hard to defend having spent $600 million, and before you actually get it completed, then you are saying, "Well, we are going to the next generation, or we are not interested in modernizing it, or modifying it to make use of it."

How do you respond?

General VUONO. Well, we believe we made the correct decision there. It was not the decision we wanted to make, but again, we were looking at significant funding constraints. We had to determine which plants would give us the greatest capability for the future in terms of ammunition range and capability.

Senator LOTT. The most modern one? You decided your most modern one would not do that, but your older ones would?

General VUONO. The rounds that we produce down there, are rounds that give us a certain capability from a range standpoint.

We have the capability, elsewhere, to give us a round that will give us a greater range capability, and we felt that that was important to us.

Senator LOTT. Well, I hope, General, you will continue to look at some possibility for modification, some way to make use of it. That may actually cost no more than, or maybe even less than the mothballing plans that you have.

One of the things I always liked about the Navy is that they go about it with a—I guess maybe it is the influence of the Seabees—can do attitude. We will find a way to modify it, or make some change in our plans to make use of what we have.

OK. I do not want to start up a dispute here between the branches, but I thought——

General VUONO. No, you do not have to worry about that, sir. There is no dispute between us.

HURRICANE HUNTERS

Senator LOTT. General Welch, in the budget proposal—again, the proposal was made to eliminate the hurricane hunters. The Air Force has been wanting to do that for 2 years. Congress did not let you do it, because there is—we do not have the satellite capability to determine the strength, direction. And although the information we need from those hurricane hunters—there is no alternative.

The Air Force says, "We do not hunt hurricanes." The Weather Service says, "We do not fly airplanes."

It is a case where everybody probably agrees we need them, but nobody wants the cost or the burden of paying for them. There needs to be a solution. And this is not the parochial thing with me. It involves all of the Gulf States and the Pacific.

You know, Senator Inouye, I know, is very much interested in this.

So what we need to do is to sit down with DOD and the Air Force, and the Weather Service, and NOAA, and everybody, and decide how we are going to solve this problem.

How do you respond to that, sir?

General WELCH. Well, as you know, the initial Air Force position 3 years ago was that whatever the importance of the mission—it is not a DOD mission. We do not need that capability.

And we had thought that the National Oceanic and Atmospheric Administration was going to take over that mission. When they decided they could not do that, and we expressed a willingness to continue to perform that mission for the reasons that you just described; we were going to transfer enough capability into the Reserve Force in order to provide adequate coverage.

However, we did not change our conviction that that is not really a DOD mission, but a service that is more easily provided by DOD, apparently, than by the National Oceanic and Atmospheric Administration.

In this latest round of budget cuts, the Department of Defense simply decided they could not afford to provide that service.

Senator **Lott**. Thank you, Mr. Chairman. I would like to say I appreciated the early effort to work out a solution by use of the Reserves, and I hope maybe we can find a way to go back to that, or some other solution to a real problem.

Thank you, Mr. Chairman.

Chairman **Nunn**. Thank you, Senator Lott.

Senator Exon.

Senator **Exon**. Mr. Chairman, thank you very much.

Gentlemen, thank you for being here this morning. I think we can tell by the attendance at our meeting this morning that we are very much concerned about the decisions that are being made. I salute you for serving in your present position at a tremendously difficult time. It is a lot easier to serve when you have been given, basically a blank check, to go out and do anything you want to do.

The rubber is meeting the road now, and while we will have some discussions back and forth on what is right or wrong, I want to salute you as individuals, and a group, for doing more than a commendable job overall, with regard to cooperating with the new Secretary and meeting his problems. And I know how difficult budget cuts are for all of you.

In my limited time this morning, let me get into a couple of areas that I would like to get spelled out as far as you see them. And I will start with you, General Welch.

RAIL-GARRISON MX

We have been tippy toeing around the resolution of the problem between whether we should proceed post haste with the rail garrison MX, and how that fits in with the Midgetman.

I think the wrong decision was made on that, but I think the decision was made in a fashion that, at least, meets the situation that we were confronted with.

And let me see if you can help clarify this particular area.

Is it not true that proposal to move the 50 MXs to rail garrison, and the compromise and understanding that went with that last year, does not in the end, mean, that we are going to proceed immediately, or as quickly as we can with the rail garrison MX proposal.

And that the Midgetman, which will be kept alive, will move on down the line further. Or to put it another way—has not the rail garrison been decided on the first move, and that the Midgetman will be kept alive, but will receive second place priority, as we try to meet, the best we can, the needs of our nuclear deterrent, given the budget constraints?

General **Welch**. I think there are a couple of things that almost everyone agrees on. One is that we need a land-based mobile ICBM.

And second, that we would rather have Peacekeeper on the rails than in the silos.

There is another set of facts that, of course, are not subject to debate. And that is that the Peacekeeper missile is here. We have 50 of them fielded. It has completed 18 tests flawlessly, while the

Small ICBM will have its first test, hopefully, within the next couple of weeks.

So, simply, the order of availability says that first priority has to be to rebase those first 50 Peacekeepers on to the rails.

And all of these debates about warning time, and whether or not the President will make the decision are, really, fairly irrelevant to that particular issue—in that, clearly, we are better off with them on the rails than we are in the silos.

As to the commitment to the Small ICBM—what the money in the budget does, is it completes the development of the Small ICBM, all the way through test.

Now, what it does not do is all of those other things required to complete the basing mode and to actually deploy it, which will take place, of course, well beyond the FYDP.

What we are committed to, on the Small ICBM with the budget, is to complete the development of the missile through testing.

SMALL ICBM

Senator Exon. Are you and the Secretary of Defense, and the President going to stand firm on the $100 million—the "minor" commitment to the Small ICBM, or are there feelings within any of those groups that there will be an all-out effort to try and raise that amount, and subtract it from other portions of the budget?

Are you prepared to stand on that, or is that just something that was thrown out to continue the tippy toeing?

General Welch. That funding profile was what was required to do what I just described.

Senator Exon. And that is a $100 million maximum for the Small ICBM, right?

General Welch. In 1990.

Senator Exon. What is it the following year?

General Welch. It is $200 million in fiscal year 1991 and gets up to $350 million in fiscal year 1994. The total over the FYDP is $1.2 billion. I do not remember the annual breakout, but the FYDP dollars required to proceed with the completion of the development testing certification of the missile is $1.2 billion.

As to whether or not—what the attitude will be toward efforts to increase it—I have also told you what is not in that program. And that is the money required to complete the basing, complete the Hard Mobile Launcher [HML], and do those sorts of things.

The answer to your question is that I would be delighted to have somebody add money. I will not be delighted for them to take it away from other priorities. And I do not know how to add money without taking it away from other priorities.

And that has always been our difficulty with the Small ICBM.

The President has decided, and I support it, that we can afford that kind of profile in light of other priorities. And I fully support that profile.

B-2

Senator Exon. One last question. When will the B-2 fly? We were out to see it in December, I believe. It was tentatively scheduled for February or March.

What do you see as the time when the test flight—the initial test flight will actually take place? And, in this classification, what can you tell us have been the delays beyond what we had earlier anticipated?

General WELCH. Well, I think that in classified letters to the committees I have described the situation, and that description remains valid.

Let me just—in an unclassified way say that the checkout is the current delay. Simply, the checkout of all the subsystems in the airplane. As for an example, we had an environmental control system plumbing failure at just below 150 percent of design strength, which was a test point.

We had some electrical problems in checking out the softwares, et cetera.

But those are checkout problems. Most of those are behind us. It is proceeding on course. There are no showstoppers, and I earnestly hope it will fly within the next 2 months.

Senator EXON. Thank you.

Thank you, Mr. Chairman.

Chairman NUNN. Thank you, Senator Exon.

Senator Thurmond, I would recognize you next, and I would, if the committee will entertain just a brief interruption here, and if our witnesses will excuse us, I would like to have a vote on the Paul Wolfowitz nomination to be Under Secretary of Defense for Policy.

Senator Thurmond, do you mind if we interrupt just a moment for that.

[Whereupon, at 10:35 a.m. the committee recessed to reconvene immediately to conduct committee business.]

[Whereupon, at 10:39 a.m. the hearing resumed.]

Chairman NUNN. Thank you.

Senator Thurmond.

Senator THURMOND. Mr. Chairman, I regret that I had to leave, but I had to go to the Education Committee. Unfortunately, I was unable to attend yesterday's hearing with Secretary Cheney and Admiral Crowe. I understand they both made their usual excellent presentations.

Mr. Chairman, I want to state for the record this morning that I support the President in his stance regarding the negotiations on the short-range missiles in Europe.

I want to say with regard to the MX and the Midgetman, heretofore, the military people, as I understood—mostly, anyway, favored MX, if we get the bigger bang for the buck. And it is my feeling that that was the best buy we could make.

Now, if the President wants to go along with the small Midgetman, I will cooperate with him. But I think it is well for that matter to be given consideration. It is going to take millions of dollars to try to do both—in this time, with the budget crunch.

It seems to me that if the MX is the right missile, and will answer the purpose, that we had better consider adhering to it.

I want to join with the members of the committee in welcoming the service Chiefs today.

Gentlemen, each of you have had to make some difficult decisions and compromises in order to reach your budget goals, and I congratulate you on your efforts.

I have always supported a strong defense, and will continue to do so. However, I am also concerned about our Nation's large deficit.

Since these two concerns are vital to our country, this committee will have to make some difficult decisions to assure that we get the most defense for the dollars spent.

I want to say further—if we have to make some choice here for maintaining an adequate defense, or going with more social programs, we had better make the wise decision, and maintain a strong defense. A strong defense means our freedom. It is absolutely essential.

Now, Mr. Gorbachev has given indications that he wants to open up, and we favor all of that. But, overall, all over the world they have not shown yet their clear intention of what they are going to do. And we must keep a strong defense if we expect to remain free.

Now, General Vuono, in the proposed budget, the Army proposes to stop the procurement of the Apache helicopter in fiscal year 1991, I believe. It also terminates the OH-58D Army Helicopter Improvement Program.

LHX

We have been told that the savings from these programs will allow the Army to continue its development of the LHX. My concern is that the Army is betting everything on the LHX, which will not be fielded until 1996—is that correct?

General Vuono. That is a close date. Yes, sir.

Senator Thurmond. Are you confident that the LHX will be fielded in 1996, and will the Army have an attack helicopter capability, if the LHX development does not work out?

General Vuono. Yes, sir. The LHX will not replace the Apache helicopter as an attack bird. We will continue to fly the Apache as part of our aviation program. The LHX will provide us a scout bird that will replace some aircraft that—by the time it is fielded, will have 40-year-old technologies—to include the OH-58 series—Alpha and Charlie, and our Cobra series aircraft.

The LHX is a centerpiece of our future aviation plan. We need that bird. To do that we had to give up some of the buy of the Apache and the OH-58. The improved element of the OH-58 gives us now a near term scout capability. We bought some of those, but we had to terminate that program because of affordability.

AIRMEN/SOLDIERS—LIFESTYLE DIFFERENCES

Senator Thurmond. General Vuono, yesterday the Philadelphia Inquirer carried a story on the differences in the lifestyle of the airmen and the soldiers.

Mr. Stone, the Deputy Assistant Secretary of Defense for Installations is quoted as complaining that the Army forces its troops to endure barely human living conditions. He further stated that the difference was not because of funds, but because of the attitude of the commanders.

Would you care to comment on Mr. Stone's assertion?

General **Vuono**. Yes, sir. I certainly will. I disagree with that 100 percent, Senator. I take great exception to that.

Senator **Thurmond**. I thought you would.

General **Vuono**. If there is one thing I am committed to, and every leader from sergeant through general in the Army is, it is to take care of our soldiers.

I take great exception to that article. By the way, I talked to Mr. Stone last evening about that—at his initiative. I do not think that he meant it the way that article came out. I cannot comment on what that was, but I can tell you that we take care of our soliders to the very best of our ability, and will continue to do so.

Senator **Thurmond**. The Army has done that in the past, based on my experience in the Army. I felt that was the case. And maybe the matter was not reported just as it should have been.

SOVIET NAVAL FORCE REDUCTIONS

Now, Admiral Trost, you indicate in your prepared statement, that only the possibility of a less threatening Soviet Union, makes the delay in achieving a 600-ship Navy acceptable.

We have heard a great deal about reductions in Soviet land and air forces. What announcements have they made in regard to naval force reductions?

Admiral **Trost**. They have made no announcements at this point about naval force reductions, although there has been public comment—primarily in the European press—about what may be behind some of the comments that they are making. Specifically, they are offering for sale and for scrapping, older submarines and surface combatants which have outlived their usefulness and are probably a burden to them economically.

I suspect they will use this as a lever to attempt to continue the efforts to cause us to reduce our naval forces. They have, in fact, been increasing the quality of their forces in recent years, despite the rhetoric that we now hear. They are turning out higher quality submarines. They are turning out two aircraft carriers, to be followed by a third, which I am told I cannot refer to as a large deck carrier, because it is only as big as the U.S.S. *Midway.*

They, clearly, are modernizing their force capability across the board at the same time that they are doing their best to include naval forces in reductions—our naval forces.

SOVIET CARRIERS

Senator **Thurmond**. Speaking about the large carriers that they are planning, what is the purpose of the Soviet carriers, and what threat do they pose to our forces?

Admiral **Trost**. I think they probably have recognized the importance to their forward deployed forces of the ability to provide maritime air support to those forces. And I suspect that, having read about and observed over the years the capabilities we use and enjoy, they have decided they would be well served with the same capabilities.

Senator **Thurmond**. My time is up. Thank you, Mr. Chairman.

Chairman **Nunn**. Senator Glenn.

Senator **Glenn**. Thank you, Mr. Chairman.

Earlier, General Gray indicated that he would be prepared to submit an additional statement for the record. I would ask unanimous consent that he be asked to prepare that statement and submit it for the record at this morning's hearings.

V-22

Senator GLENN. I believe that offer was relevant to information on the V-22, and we would ask that it be restricted to that. That was the offer that was made.

On the V-22, without going into all the details of that—the advantages and disadvantages, which I went into some detail yesterday when the Secretary of Defense and the Chairman of the Joint Chiefs testified.

I will not go into that but I understand that Mr. Chu over there at PA&E has been against the V-22 right from the start, and has prepared some of the analysis, according to Aviation Week, anyway, that made the decision possible.

I understand that the analysis indicates that the types of aircraft that would be required to be procured to perform the same mission as the V-22 was going to do, and to meet the same combat requirements—CH-53, CH-60. Plus, the ships to carry them.

It was probably going to be more expensive than going ahead with the V-22.

Do you have information as to how much it will cost to procure and support the aircraft—those aircraft, compared to the V-22 program? Or, can you submit that as part of your record?

General GRAY. Yes, we do, Senator. It would be more appropriate to do that as part of the record, because these figures move a little bit. You have to have the detailed rationale behind them.

Let me say in fairness to Dr. Chu, and to the process, we have got to do our bit to find the funds to meet the top line. It is a tough operation no matter which service you want to address. Within that context, clearly, what emerged is a difference of opinion, with respect to the cost benefit analysis; this resulted from the data between Defense Department's analysis and ours. Our data comes from a longstanding analysis on this topic, we are going to need more of the Blackhawk-type helicopters to replace the MV-22, and more 53Es to make up the difference. The cost differential is considerable over the life cycle.

Senator GLENN. If you could give us details of that in your statement, I would appreciate that.

And since we have limited time this morning, let me just add, that for 9 years the Congress has supported the aircraft—the concept of it, and has spent some $2 billion dollars in developing it.

One of the questions, though I had for Admiral Trost—I understand that the V-22 contractors have said that they are going to terminate all their activity with regard to the V-22 as of tomorrow, unless the Navy can come up with some additional funding options.

What are the prospects in that area?

Admiral TROST. Senator Glenn, I have read that same comment. I am not prepared to comment on that, because I am not involved in the contractual relationships. I would have to defer to Secretary Garrett, and offer to provide this for the record.

[The information follows:]

Bell Helicopter reconsidered its options with regard to continuation of full scale development of the V–22 and decided to continue work through the end of the contracted fiscal year.

Senator GLENN. This was a letter to Secretary of the Navy, I believe. Yes, I believe it went to the Secretary of the Navy from the contractors.

Admiral TROST. I believe it did. I have seen the letter, but I do not know the specifics of the business arrangements. I am—under Goldwater-Nichols—no longer in that business.

Senator GLENN. Well, okay. Another subject.

Admiral TROST. I did not mean to duck that. But we can provide the answer for the record.

COMBAT READINESS OF NAVAL AVIATION

Senator GLENN. OK. I would like to move on to a different subject here. Admiral Trost and General Gray, last year the committee expressed very serious concern over combat readiness of naval aviation.

Our report had some language in it like this—there was a shortfall of naval combat aircraft. The average age of combat aircraft was increasing above acceptable levels. There were drastic reductions to the Navy's aircraft modification accounts.

We asked for a report back to Congress on how to plan to correct those problems. We have received that report, which generally supports the committee's concerns that I expressed above.

Given this background, though, we now find it hard to understand why the amended budget does the following. It terminates the V–22. It terminates new production F–14D's, without any increase in the remanufactured F–14A's. It terminates the new production of EA–6B's. It reduces the number of FA–18 strike fighters to be procured in 1990, 1991—reduces the number of SH–60F antisubmarine warfare helicopters to be procured in 1990. And we already know we are 1,500 pilots short in the Navy. We are about—over 1,500. We are about 12, 12½ percent short on pilots right now, which we are trying to address by other means through the manpower subcommittee I chair.

But given these proposed actions in this budget, how do you assess the readiness and the prospective readiness of naval aviation?

Admiral TROST. Well, clearly, Senator Glenn, it is an area of great concern to us. While we can man and provide the necessary aircraft in an emergency to deploy any of our existing decks and to meet Marine Corps missions, we are building a problem into the outyears.

We will see a decline in available aircraft in about the 1996 time frame. Specifically, the F–14's, which run out of service life.

We are looking to the increased service life resulting from the rewinging of A–6's to maintain the inventory there.

The reductions in the SH–60 Foxtrot helicopter for carriers will result in a stretching out of that program. In other words, there will be at least one more year of procurement on the other end as a result of the loss of one year's procurement for that helicopter.

As we look toward the future, we are going to have to manage our assets very, very wisely, and we are going to, without question, have no option but to accept the aging of airframes. That, in turn, can well impact on our ability to retain people who like to fly newer things in the inventory.

Senator GLENN. My time is up, but just one more question.

WAR GAMES

General Vuono, out of the war games that we all participated in down there last summer at Pensacola—the worldwide war games, which I found extremely informative. We again recognized that there was still a significant deficiency in combat support, combat service support capability that has mostly been given to the reserves. We continue to talk about that year in, year out, year in, year out, ever since I have been around here, almost. We, at least for the last 4 or 5 years, we have been talking about those deficiencies.

What is being done to address those, because those are war stoppers, if we get into a real sustained combat beyond about 2 or 3 weeks?

General VUONO. I agree with that. It is a significant and critical battlefield capability that we need to improve on. I think we have.

I think, first of all, we have improved in terms of the readiness posture of those organizations over the past couple of years. We put increased emphasis on equipping them through various means of balancing equipment across the board. We have a concept, I think you know, first to fight, first to equip.

We worked hard to improve there, qualification of personnel. That is a tough one because of the length of some of those courses.

And, finally, we have increased the numbers of combat service support individuals and units, particularly in Europe, on the ground. We have put more units on the ground to compensate for the shortfalls problem that the CINC over there had raised a couple of years ago. We have done that in 1989, and we have some more going into 1990.

So I think we are making steady progress. It is tough, as you very well know, Senator. We are going to continue to work hard to continue to improve in those areas.

Senator GLENN. OK. My figures are that we are still 45 percent in the Reserves in those areas, not combat ready. Those units are not combat ready—45 percent. And my time is up.

General VUONO. My figures are a little different, and we need to discuss the difference between the two figures.

[The information follows:]

RC CS/CSS READINESS

General VUONO. My figures are a little different. Current unit status report data reflect an upward trend, among all components, in combat support/combat service support (CS/CSS) units reporting C-3 or better. Currently, [deleted] of Total Army CS/CSS units are C-3 or better (C-5 excluded). This represents a 20 percentage point increase over the past three years (Oct. 85–Apr. 89). Like Total Army CS/CSS, the respective Reserve Components (RC) have shown improvement during the same period. The Army National Guard (ARNG) has increased 18 percentage points in units reporting C-3 or better ([deleted], C-5 excluded), while the U.S. Army Reserve (USAR) has improved 19 percentage points ([deleted], C-5 excluded.)

The Army recognizes that in spite of this positive growth, the area of CS/CSS remains one of our greatest readiness challenges.

Senator GLENN. Thank you.

Senator LEVIN [presiding]. Senator Coats.

Senator COATS. Thank you, Mr. Chairman.

MV-22

General Gray, I appreciate your candid statement regarding the MV-22, and both your oral statement and your written statement, I think, makes a very strong case for it.

There has been no indication, and correct me if I am wrong. But there has been no indication of research or development problems with that plane, has there?

General GRAY. No, not really in that sense. The aircraft and technology has been flown, as you know, since 1977. So there really are no technology problems here, other than the normal research, development and acquisition process.

Senator COATS. We are just dealing then with a budget decision, not an operational problem, or a production problem, or a development problem—hitches that would lend some credibility to modifying or terminating the program?

General GRAY. No. In my judgment, we are dealing with a very expensive airplane. It's expense can be justified, because we take a quantum jump into the future with respect to operational capability. But, still a very expensive airplane, during this cycle. It is not the easiest to be able to fully support given the broader universe that the Department of Defense and the President have to deal with and their economic constraints.

Senator COATS. Sure. One of the concerns—I mean, one of the considerations, I think, in making the decision was the fact that, or the allegation that—well, it is only a one-service capability aircraft.

Now, I guess there has been some considerations about using it beyond Marine Corps use. And I guess I would like to direct my question to Admiral Trost, and also General Vuono.

What is the potential use for this aircraft in the Navy, and in the Army?

Admiral TROST. Well, downstream for the Navy, we have looked at several potential applications. The most promising of them appears, at the present time, to be one for carrier on-board delivery. An aircraft that, in fact, can transfer materials and supplies to any platform in the fleet with a large enough landing platform on deck.

We have also looked at but have yet not been totally convinced that it is a suitable platform for a carrier, or a surface antisubmarine warfare platform. It certainly has application in the search and rescue area, and probably downstream as an aircraft to perform other missions from smaller deck ships and aircraft missions that have not yet been fully developed.

Senator COATS. Where do you place that on the list of priorities?

Admiral TROST. In terms of my own U.S. Navy, only, as opposed to U.S. Navy and Marine Corps, that it is not very high on our priorities list at the present time, and that Navy application would have been addressed well downstream after the Marine Corps requirements were satisfied, and after those of other services for special forces and search and rescue were satisfied.

Senator **Coats**. And General Vuono.

General **Vuono**. Senator.

Senator **Coats**. Correct me on your name.

General **Vuono**. Vuono. It is difficult to pronounce.

Senator **Coats**. Sorry.

General **Vuono**. We have looked at and followed the V-22 very carefully, and we still are looking at technological opportunities.

Unfortunately, our major battlefield deficiency is seeing the battlefield. And that is corrected through the near term with the AHIP helicopter—the OH-58D, and with the LHX. We will continue to monitor the V-22, but we do not now have a requirement for it in terms of the most significant battlefield deficiency that we have.

Senator **Coats**. What about special operations use?

General **Vuono**. That is for General Welch.

General **Welch**. Fifty-five CV-22s were programmed for special operations.

Senator **Coats**. And what if this is canceled—what will you do now?

General **Welch**. Well, we will have to try to cover that capability again—much the same as the Marine Corps with helicopters and C-130 tankers, to give the deeper penetration.

Senator **Coats**. How much does that reduce or diminish your capability—projected capability?

General **Welch**. It does not provide the long range exfiltration capability required to be able to pull the special operations teams out of hostile areas.

What it means, in essence, is that, while that could be done with long range helicopters and tankers, that is really not a very practical approach. So what we would do is simply, in practical terms, give up the capability.

ASW PROJECTIONS

Senator **Coats**. If I could, in my remaining time, just quickly turn to and ask Admiral Trost to give me a little bit of information regarding your ASW projections. My understanding is the budget reduces, or eliminates some of the P-3s and some of the upgrades there.

Can you give me your assessment of that—what you tend to substitute for that, and just where we are going?

Admiral **Trost**. Well, I would address ASW in an overall status—there are a lot of improvements coming along in ASW programs, because we have continued to maintain ASW as our highest priority conventional program.

The impact of the forces that will go out are essentially as follows: In the shipboard area first of all, the additional 24 frigates of the 1052 *Knox* class directed to go into the Naval Reserves over the next 4 years are front line antisubmarine warfare platforms at the present time. They will clearly retain their equipment capability. Manning them with reserves and the lower OPTEMPO means that they will lose some of their immediate readiness to respond to war time tasking. And of course, they are not available for peace time contingency, or crisis tasking, short of mobilization.

The P-3 aircraft that are going out of the inventory are 30 of the oldest P-3 alphas, and 43 of the P-3 bravos. Now, what this does, in essence, is to take away 73 airplanes that have a capability against about 60 percent of the current Soviet submarine inventory.

In the longer term, the pluses from that action are that it simplifies training by taking the A model out of the fleet. It does reduce the numbers of aircraft per squadron in our reserve squadrons to six. We will have to work hard to ensure that we can maintain crew readiness, and the ability to deploy, with that number of airplanes and a smaller number of total air crews in the inventory.

Senator **Coats**. Well, my time has expired. And I will pursue this question further at another opportunity.

It just seems to me at a time when the Soviet submarine threat has been modernized and improved substantially, we are going in the opposite direction here in terms of monitoring that. But—well, I will pursue that when I have additional time.

Thank you, Mr. Chairman.

Chairman **Nunn**. Thank you, Senator Coats. Senator Kennedy.

Senator **Kennedy**. Thank you, Mr. Chairman. I, too, want to welcome the Chiefs here.

V-22

General Gray, you make the case, as the Secretary did on the current proposal for substituting the various helicopters for the Osprey. I do not know whether you do it very convincingly, however.

I understand from Senator Glenn that we are going to receive from you the various costs for substituting other capability for the Osprey mission.

It seems to me that if we go this route you are eliminating a very important element which has been developed by the Marines, its capability.

You have the Harrier attack fighter that gives you close support. You have the rapid landing capability now. The Osprey seems to me, to have a synergistic effect, in terms of the capabilities of those other two elements in the corps. Can you comment on that observation?

I understand what your position is in terms of supporting the current administration capability. But, how do those elements work together, and what kind of weight should we give that capability, not only the Marines, but also the special operations forces?

General **Gray**. How does one get our statement into the record? You have got it exactly right. You have got our concept, sir.

No, Senator, seriously, the need to come from over the horizon and project power and flexibility over long distances—is clearly understood and recognized within the Department of Defense. That is not the issue. It is the question of affordability at this particular time—in my view. I cannot speak for the others, but I believe that that is the gut issue. There is no question that under the present program now, we will be conducting operations in the next decade and in the next century with a capability that is far, far less than the MV-22 type concept.

Senator KENNEDY. Well, is it fair for us, though, to look at not only substituting the choppers for this kind of capability, but also to evaluate what the capability is in relationship to that other capability of the Marines, in terms of the Harrier and the landing craft?

General GRAY. I think so. I think that it must be evaluated on the synergism that you suggested in our concept of coming from the sea, and in the expeditionary environment.

FAST SEALIFT

Senator KENNEDY. Let me, Admiral, just move on quickly to the area of fast sealift. I know that you stated in your testimony—I guess on page 5, about what has been spent in terms of fast sealift over the past years.

Of course, that, as I understand from previous testimony that we have had up here, really is the completion of programs that had been started even under a previous administration—President Carter's for the ships, and most of the other capability is in support, rather than in the fast sea-linked capability.

But, whatever our own view about that might be—even since that $8 billion, or $6 billion has been expended, we have had the CINCs from Europe that have all stated here, even since that, that this was their number one priority. And given the fact that if we are going to see any progress made in terms of conventional reductions—that the Soviets withdraw to an area where they can obviously reenter that equipment by rail, we are going to have to bring that equipment back by sea. The heavy kind of equipment.

Do we really need another study? It appears that we have had studies, you know—1981 study, the 1984 study—we have just finished this other kind of a study, and when is the Navy going to put out a TOR on it?

Admiral TROST. I think we need to differentiate between fast sealift as I understand it, being something much faster than anything that is at sea today, and the lift which we have purchased at the present time.

The Navy does not have a TOR for fast sealift. Neither do the CINCs who would be expected to come in with the requirement at this point in time.

You are correct that it has been studied and studied and studied, and there has been a lot of disagreement on what the overall sealift requirement is.

There is fast sealift in existence at the present time. The monies that were expended since 1981 by the Department of the Navy were for a number of purposes. They were to provide in excess of 100 ships in the Ready Reserve Force to augment the existing national defense fleet of primarily older ships.

They were to provide for the eight fast sealift ships, the SL-7s, which were modified for rapid transit with Army equipment across the Atlantic. It was for the purchase of an additional 12 pre-positioned ships for Army and Air Force, and 13 for maritime pre-positioning for the Marine Corps. It was for the provision of two hospital ships, and two aviation support ships for Navy and Marine Corps use. And it was for the provision of off-loading equipment and handling equipment for undeveloped ports.

In addition, we put a rather considerable expenditure into equipment that would make existing ships in the merchant inventory capable of hauling military unique cargo across the oceans.

Senator KENNEDY. It is 8 fast sealift, or 95 Ready Reserve for ships to sustain. It is not, as I understand it, fast sealift, and some of the other elements that have been mentioned. And those have been completed in the early 1980s, and nothing has been requested since then.

Admiral TROST. That is correct. And, as a matter of fact, the funds and the responsibility were transferred to MARAD this last year. We no longer control the ships we have bought, even for exercise purposes.

The funding came, not at anyone's direction, except internal Navy direction. And it came at the expense of other programs at a time when we had the monies available.

Senator KENNEDY. My time is up, Mr. Chairman.

Chairman NUNN. Thank you, Senator Kennedy. Senator Warner.

Senator WARNER. If I could pass for 1 minute.

Chairman NUNN. Senator Wallop.

Senator WALLOP. Mr. Chairman, thank you.

I would say, gentlemen, that if the only thing you had to confront was the threat currently defined by Soviet rhetoric, and its echoes in the Western press, this budget might fairly have been said to have been a considered proposal.

Unfortunately, for you, for the country, and for this committee, the budget, some of the participants pay heed to nothing but dollar targets.

I listen to people express their anxieties about one program or another—whether it is Osprey, or antisubmarine warfare, or Army requirements, or Air Force requirements.

The problem is that, as the Secretary said yesterday, he cannot deliver us more defense with fewer dollars. And, certainly, the budget participants did not pay any heed to the capabilities and their requirements that they drive in both the global and local conflict sense.

We are sitting here in a funny kind of way, in a much more common agreement than perhaps past budget conferences may have produced.

ASAT CAPABILITY

Admiral Trost, let me ask this—how do you feel about the requirements for developing an ASAT capability for the United States, and in particular, how critical are satellites to fleet activity, such as resupplying NATO?

Admiral TROST. We have been on record, Senator Wallop, as being supportive of an ASAT capability in order not to be at the risk of a potential enemy, who could, essentially, knock us out, because his eyes and ears are free of interference by us. So we have been strongly supportive of a capability.

Senator **Wallop**. And I assume that you still support the Miracle laser program as a near term directed energy ASAT capability?

Admiral **Trost**. Yes. That program has continued. But, predominantly, as I recall, under SDIO auspices.

Senator **Wallop**. But, still, with a great deal of potential for the Navy's requirements, as well as, I assume, Air Force requirements for ASAT?

Admiral **Trost**. Yes, sir.

FIRST PHASE STRATEGIC DEFENSE

Senator **Wallop**. General Welch, the JCS has set out a requirement for a first phase strategic defense. I must assume that it is your military judgment that some specific military mission is generated by that requirement.

And since we are going to be needing to make FSED decisions on some components of that first phase system within the next couple of fiscal years, could you tell the committee what the JCS is doing to prepare the services to manage these programs through deployment?

General **Welch**. Yes, sir. The JCS stated requirement for the phase one system, I think, was pretty straight forward. It was stated in terms of ability to break up, or reduce the Soviet confidence in the first wave of multi-wave attack.

The difficulty that we are having at the present time, of course, is that there is a good bit more technical work to be done before we can adequately define what that system is. Whether or not that system will be based on space-based interceptors, or Brilliant Pebbles, or whatever. And so, the program has been structured to ensure that the technical work is done, so that you can have the kind of information you need to make intelligent decisions on an FSED.

There are certain elements of that program where that is already very clear—BSTS, for example. We need BSTS, with or without SDI. And you need BSTS with any kind of SDI deployment.

So, that is the first one that you will face for an FSED decision, and I think that is fairly clear. But, the longest pole in the tent for SDI is the command and control. And we have established a national test bed and we are proceeding with that very well, I think.

Senator **Wallop**. But, in fact, that is part of my question, but specifically, this has to drive some mission requirements. And are those now being defined and parceled to the services, or will it go primarily to the Air Force?

General **Welch**. Do you mean the actual operation.

Senator **Wallop**. Well, the mission requirement. I mean, it seems to me that if you are weighing all of these things, you have to weigh them against something that they will be required to do.

General **Welch**. As I said, the stated requirement for phase one was to break up that first wave attack, or at least to introduce great uncertainty in the mind of the Soviets about the probability of succeeding with that first wave attack. That is not something that can be done any other way, and so you do not trade something off for that. As for the assignment of missions to services that is pretty natural.

The Air Force will be responsible for the command and control integration, simply because of the other things we do. But I think the mission of phase one, and the service approaches to phase one are fairly well defined. What is not well defined is the hardware solution for the kill mechanism of phase one.

BRILLIANT PEBBLES

Senator WALLOP. And work proceeds apace on that, based on what—treaty requirements, and physical abilities?

General WELCH. Both. And clearly at the present time, and any near term—anything in the next 12 or 15 years. There are two alternatives that are serious contenders. One is the space-based interceptor as you have had described to you, I am sure, and the Brilliant Pebbles.

Now, we have to carefully examine the treaty implications of Brilliant Pebbles. And we also have to carefully examine the command and control implications of it—how we control that.

Senator WALLOP. Can they be weighed in terms of giving decisions to us, to the President, and to others with regards to treaty requirements on the basis of capabilities first, and treaty requirements second?

General WELCH. Oh, I think quite so. Absolutely.

STRATEGIC FORCE BUDGET

Senator WALLOP. Let me move out of SDI into the strategic force budget in the 5-Year Defense Plan. From 1981 to 1985 we spent, roughly, 46 percent of the strategic force budget on the bomber force. And the ICBM force received about 18 percent.

If plans for the B–2 continue on schedule in the current FYDP, we will spend well over 40 percent of that budget on bombers.

The ICBM force will receive only about 10 percent. Does that not represent an unbalanced approach to maintaining the efficiency of the triad, and can we afford to continue to fund bombers so disproportionately at the expense of a land-based missile force?

General WELCH. It is not an unbalanced approach. Bombers are a good buy if you measure the effectiveness you get for the money you spend, even if you use the most simplistic measure, which is the cost per target held at risk, or the cost per warhead. You can plan against the target. Bombers remain a good buy, even if you only consider their strategic nuclear role.

The other elements, of course, is that the value of bombers is greatly increased by the fact that they are the most stabilizing element of the strategic triad. And all of the arms control negotiations reflect that mutual understanding, both by the United States and by the Soviets.

So, that puts an additional premium on the deterrent value of the bomber. In addition, the bomber has many other roles. It supports maritime operations with mining and other kinds of operations. It supports conventional operations of all kinds.

But, even from the simplistic—the most simplistic measure of just what do you pay in order to buy the capability to hold the Soviet target at risk, the bomber is competitive with any other approach to holding that target at risk.

Senator **Wallop**. General, my time is up, but I would like to pursue, thereafter, air defenses, in terms of how it reflects all your missions. Thank you

Chairman **Nunn**. Thank you, Senator Wallop. Senator Levin.

CROSS-DECKING

Senator **Levin**. Thank you, Mr. Chairman. Let me add my welcome to our Chiefs. First, Admiral Trost, when I visited Admiral Hardisty earlier this year, he told me that we are cross-decking like crazy. As I understand it, cross-decking is a term to describe a situation where the stock of missiles, for instance, is so tight that you have to take them off of one ship when it comes to port and transfer them to a ship that is ready to leave port.

This budget proposal, as I understand it, would stretch out, or cancel, every one of our Navy missile programs. Is that a matter of affordability—is that why this proposal is this way?

Admiral **Trost**. I start at the beginning and say cross-decking like crazy surprises the hell out of me if it is coming from Admiral Hardisty. Cross-decking, yes, for the following reasons.

Eight years or so ago, when I was out there, we were cross-decking for shortages. Today, we cross-deck, primarily, not totally, but primarily because once a missile is put out in fleet service, it has a certain life before it gets called back to be recalibrated and checked to make sure it is OK. That cross-decking is intentional, and that is done routinely.

There is some cross-decking where we have shortfalls in certain kinds of weapons, especially when there are numerous forward deployed platforms. Most specifically, that cross-decking for air to air missiles is the one with which I am most familiar. The cuts that were taken in our missile programs, both surface to air, and air to air, were totally budget driven, and would not otherwise have been taken.

Senator **Levin**. So this is purely a matter of affordability?

Admiral **Trost**. It is a matter of affordability. We need a lot of things we are not going to be able to buy.

Senator **Levin**. Including those missiles?

Admiral **Trost**. That is right.

AIR FORCE SUSTAINABILITY

Senator **Levin**. Now, General Welch, in your statement you indicated that sustainability for the Air Force is poorly funded, I believe. And last year, General Hansen, who is commander of the Air Force Logistics Command, testified that we are losing ground in all areas of sustainability.

Why are we losing ground? Is that purely affordability also?

General **Welch**. Absolutely. When we look at how to maintain the balance as the reductions take effect—clearly, we put readiness at a higher priority than sustainability.

And at the present time, or the budgets that we have had over the past few years, our devotion to sustainability was such that we reached 100 percent of our required capability to fly fighter sorties, just as an example.

At the levels of funding that you see in our budget for the rest of this period—by the end of the FYDP, we will be down to about 74 percent. So that says that because of sustainability, we will only be able to fly 74 percent of the sorties we could otherwise fly.

That is just a measure of the kind of adjustments we have had to make because of the budget. And we are currently in good shape in munitions and spare parts, where we have the out year sustainability shortfall.

Senator LEVIN. But you made some cuts there that you would like to avoid if you possibly could—is that fair—in the sustainability area?

General WELCH. Absolutely. And in the President's, Amended President's Budget, we added about $850 million back in sustainability over the FYDP. That is not enough, but it is recognition that, in my view, we had gone too far and had become imbalanced in that area.

INABILITY TO DEFEND WESTERN EUROPE

Senator LEVIN. And then, General Vuono, yesterday Admiral Crowe offered the following comment to the committee—put simply, the most glaring weakness in our global posture is our inability to adequately defend Western Europe coventionally. And yet, I see that while the anti-armor requirement for the Army has grown worse, that anti-tank missiles were cut back between 25 and 50 percent. Is that true?

General VUONO. Well, first of all, I agree with what the chairman said in terms of our deficiency for conventional ground forces in Europe. I will have to check those numbers and provide it for the record, Senator.

[The information follows:]

ANTI-TANK MISSILES

Yes, it is true that while the anti-armor requirement has become more critical, the procurement of anti-armor missiles (TOW and Hellfire) in fiscal year 1990 is reduced.

TOW procurement in fiscal year 1990, like other high priority programs competes for limited resources. Although TOW procurement funds for fiscal year 1990 were reduced approximately 22 percent, we will procure 9,455 TOW missiles in fiscal year 1990 and this procurement will continue to close the gap in our anti-tank deficit. Additionally, we are currently developing a TOW second source which will not only reduce out year procurement costs but will also develop a wartime surge capacity. With this increased capacity we will further narrow the gap with significantly increased procurements in fiscal years 1992–94. These increased quantities will more than offset the reduction in fiscal year 1990.

The Hellfire missile procurement was reduced approximately 47 percent due to its decreasing lethality against recently fielded and anticipated future threat armor. We are taking a two-fold approach to solve this problem. In fiscal year 1990 we are procuring an interim tandem warhead missile to restore the Hellfire lethality against the current threat. This interim version will be replaced by an optimized Hellfire missile in late fiscal year 1992. The optimized missile includes a combined digital autopilot and countermeasure hardened seeker, and a robust warhead. The optimized Hellfire missile will defeat the anticipated armor threat through the late 1990s. We will continue producing at the minimum sustained rate of production for both Hellfire contractors until the optimized missile is cut-in.

Senator LEVIN. Is it fair to say that there is——

General VUONO. I will have to look at the preferred munitions to make sure that I give you the right data, because what we attempted to do on sustainment was to provide a level of preferred munitions for Europe.

Just as General Welch said—unfortunately, with our priorities, we did have to reduce the ramp. We had a ramp in our program on sustainment, and we had to level that ramp out. We tried to protect the preferred munitions, particularly in the armor and antiarmor arena.

Senator LEVIN. I take it it is fair to say you made some cuts there that you felt were cuts in needed weaponry—is that a fair statement?

General VUONO. In some cases, yes sir. The bottom line for me is this—that we have made some cuts in the Army budget. Just to give you some examples of conventional cuts—Apache Blackhawk helicopters were cut, the Hellfire air-to-ground missile was cut. Hawk and Stinger missiles were reduced. MLRS was cut, the recovery vehicle canceled. And the Navy and the Marine F14-D, the V-22 canceled, the FA-18 was cut, the E2C cut, TOW missile cut, Stinger canceled, Air Force F-15E canceled, F-16 buy reduced, Sparrow Phoenix sidewinder missiles canceled, and so forth.

At the same time we are doing all that, the proposal is that we buy two new mobile land-based missiles, when I think the clear sentiment of 90 percent of the people in the military, and probably in this committee is, that we need to buy one, not two.

Now, that is where we are. If you want to know why we are not buying some of the things—some of the things that we have to buy—that is part of the answer. It is not all of the answer, obviously, but it is part of the answer. We got to make some choices.

As I said, most people think we ought to have one mobile land-based system. I happen not to share that view. There are a few who believe we do not need a mobile land-based system, but I think I am in the minority.

But I do not know too many people who think we need two. One group wants the Midgetman. Another group wants the MX. And the resolution of this problem, I am afraid, is a rather typical Washington resolution. Not a military resolution. It is a Washington resolution. An inside the beltway resolution. I will support your missile, if you will support my missile.

And there is no other way to look at it as far as I can see. But the result of that decision, if we make it, is to deny ourselves needed military capability in other areas.

Senator LEVIN. General Welch, let me ask you this question. I would like your personal view—your personal view in light of the cuts that we are making in needed capabilities, and the deficit that we are facing.

MX AND MIDGETMAN

Should we deploy both the MX and the Midgetman missile?

General WELCH. Well, you will understand if—as the term—as far as how most people feel about it. I am not in the polling business. In fact, that is a fairly dangerous business to be in.

Senator LEVIN. No, I am just saying now—I was just saying most people that I have talked to in the military—I did not talk about a scientific poll. I just was referring to most people that I know in the military think we need one or the other, but not both. Most people I know of around here think we need one or the other, and not both.

My question to you is—in your personal opinion—in light of these cuts that we all knew were coming in conventional capability, in your personal view, should we deploy both the MX and the Midgetman—that is my question.

General WELCH. I think that we have it arranged about right. The first priority is clearly to rebase the Peacekeeper missile. That is a much lower cost. It is available now, and it gets us some mobile ICBM quickly.

The approach that we have taken to keeping the Small ICBM option moving forward, but without doing great violence to programs in this FYDP is the right approach. In that the funding for Small ICBMs, in this FYDP, is fairly modest, and does not cause all that violence that you have described, because it is nothing like that size program.

Senator LEVIN. But does it represent a commitment to deploy the Midgetman?

General WELCH. Outside the FYDP, I think it, indeed, certainly implies a commitment to deploy, and we would certainly—we would certainly not be recommending that we complete all of the development and all of the work on the missile, if we did not have in mind an intention to deploy it.

But that intention to deploy it is well beyond this FYDP. And as I say again, it is not doing all of that violence to the conventional systems as you describe. If it were, I would be very much opposed to it.

So I think it is a considered, careful compromise between a lot of people's belief in that missile, and doing violence to conventional forces.

Senator LEVIN. If, in our view, it will do violence to needy, conventional capability, then would you recommend we not commit ourselves to it?

General WELCH. Well, of course, that is not my view.

Senator LEVIN. I said if in our view.

General WELCH. I certainly have taken the stand before, and continue to take it, that we should not do great violence to conventional programs, in order to proceed with that. But we are not.

You know, we are talking about $1.2 billion over the entire FYDP, committed to that program, and that is a modest commitment and I think it is the right commitment.

Senator LEVIN. Thank you.

Chairman NUNN. Thank you, Senator Levine. Senator Warner.

STRATEGIC PROGRAMS

Senator WARNER. Mr. Chairman, I would like to follow on with my distinguished colleague from Michigan on the question of the strategic programs.

I think the President made the right decision and for the right reason, and I respectfully differ with you that it was a Washington decision.

We are witnessing today with Gorbachev the most unusual period in the 70-year history with the Soviet Union. While we should avail ourselves of the opportunity to seek those levels of arms control agreements, and other agreements which would bring about more peace and stability, we should not take our eyes off of that 70 years as we plan for the future.

We do not know how long Secretary Gorbachev will remain, or whether his successor will embrace his views, and move them forward.

I view the land-based strategic systems as the most important insurance policy this Nation and the Free world has for the future. And against the possibility that we might see a total 180 degree change in the Gorbachev policies, and a reversion to the policies that the Soviet Union has followed for some 70 years.

Now, as to two systems, and I will address a specific question to the General momentarily on that, that is a decision the President made in the face of the need to move toward mobility.

The Soviet Union has today, as we speak, both mobile road and rail systems. They are way ahead of us. And I think it is time that we proceed with the limited resources we have in that direction.

SMALL ICBM

A specific question to you, General Welch. In answer to an earlier question you stated that the funding for the Small ICBM protected the missile deployment. I presume it also protects the development of a survivable basing system, too?

General WELCH. The funding profile proceeds with the missile development. It does not proceed at that same pace with the basing. It protects it, but it does not push it forward.

Senator WARNER. Now, we had better spend a little time on this, because all too often we create the missile, and I think the MX is somewhat of an example, and we do not have an acceptable consensus of opinion between the executive and legislative branches on the survivable basing system.

General WELCH. In this case, Senator, I do not think there is any question about what the basing mode is. The question is when we commit funding to going forward with that basing mode. It is when we fund the basing mode.

Senator WARNER. But, there is nothing in this budget, or your approach to it, or in the Department of the Air Force, to indicate any doubt that we are going ahead with the Small ICBM in accordance with the President's wishes?

General WELCH. Assuming that the world unfolds as we currently see it, absolutely not.

Senator WARNER. Admiral Trost, the term, 600-ship Navy—is it about time we relegate that to Davy Jones' locker? I mean, it could be misleading. Let us be realistic with the people of the United States.

The funding profile in this FYDP for the next 5 years will not allow us to achieve that goal. And I think in fairness, we ought to determine whether or not there is anything that remains of it.

Admiral TROST. Let me respectfully disagree, Senator Warner. Let us separate affordability from requirements. A 600-ship Navy—

a 15-carrier battlegroup Navy, and all the things that went with it, was simply a statement of requirements to meet this country's peacetime, crisis, and wartime needs, at a level of risk that the Joint Chiefs of Staff could certify as reasonable, not desirable, but reasonable.

The fact that we cannot achieve those goals because of budgetary constraints which we imposed for good reason, has nothing to do with the goal. And so I cannot throw out the goal and say, we have been blowing a lot of smoke all these years.

Senator WARNER. No, I think it was a credible goal in the beginning, and indeed, under President Reagan there was——

Admiral TROST. It remains a credible goal, based upon national security requirements to underwrite this country's needs as stated by its administration and the Congress.

Senator WARNER. Are you suggesting that when the President comes up with his strategic review, and the priorities of our commitment, that there is going to be a mismatch between requirements and assets available?

Admiral TROST. There probably will be. There has been since time immemorial.

Senator WARNER. And do you think this document will acknowledge that?

Admiral TROST. I cannot speak to that since I have very little control over what that document will say.

Senator WARNER. Do you have a means by which to contribute to the making of that document?

Admiral TROST. I do have, and I will make my contribution. And I do not think there is any change in what is happening in the world, or in the United States and its allies' interest that would make a marked change or a reduction necessary in our military force structure.

Senator WARNER. Well, we will await receipt of the document, but we still cling to the 600-ship Navy?

Admiral TROST. Yes. As a goal.

Senator WARNER. I just wanted to put you to the test.

FUTURE OF NATO

There is much discussion about the future of NATO. We read on the one hand, and I think the President is correct and I support him, that it is too early to make any major decisions reflecting unilateral cuts or the commencement of talks over and above those now underway in conventional and strategic arenas.

Yet there is the pragmatism of the German situation. As politicians we recognize what is facing the Chancellor, and indeed, he has been a good and stalwart partner in NATO.

But my concern and my highest priority is for the welfare and the safety of our forward-deployed echelons—Army, Navy, Air Force and Marines in Europe, and the infrastructure that supports the Americans that are there, their dependents and the others who contribute to their mission.

So I would like to have the personal view of each of you with respect to this problem in NATO, and what solutions you think this country should pursue regarding our participation today and tomorrow?

We will start with you, General Vuono, because you have the largest group of troops.

General **Vuono**. I would say first of all, Senator, that I fully support what has been the linchpin of our strategy for over 40 years and has kept peace in that part of the world longer than we have ever had it in the history of mankind—the NATO alliance. A cornerstone of that is forward-deployed forces.

So I believe we must keep those forces. I think any move to unilaterally withdraw forces at a time that we are at the negotiating table for conventional force enhancement talks would be an absolute mistake.

I think not only should we maintain those forces over there, but we should modernize those forces. We should improve and continue to improve the modernization of the forces over there. I think that those talks ought to be approached with unity, with common sense, and with perseverance.

I think that the position that has been taken so far in terms of no unilateral reductions is right on the mark, and I support that completely.

Senator **Warner**. Could we go right down.

Admiral **Trost**. I would have to concur with General Vuono. And I would add that one of the dangers I see in the current speculation about Soviet intentions is that we fall into the trap of reducing the very capability we have to maintain forward-deployed forces, or to rapidly re-deploy in times of crisis.

And, therefore, we need to make sure that we do not forget that we have maintained peace for about 45 years with our current policy, and any changes to our forward-deployed capability have to take that into account. And we have to very carefully gauge the impact of those changes under likely world conditions, other than simply promises.

General **Welch**. I would just say that in some cases we are in great danger of turning success into failure by declaring premature victory.

I think the whole idea of forward-based deployments is first to deter, and second, if that fails, to fight somewhere other than the east coast of the United States. It is a very successful strategy. And the more reasonable stance being taken by the Soviets is because of that very successful strategy. I think it would be a tragedy to withdraw from that strategy at this point in time.

Senator **Warner**. General Gray.

General **Gray**. I would support what has been said by my colleagues. I think that we should be patient and above all, talk about our force structure in a global context. It takes time to do it right.

If you rush into pulling troops out of Europe, or pulling them out of Korea, or something like that, you will not get the long-term benefit of such a move. It will be helter-skelter. You will cause great turbulence within the forces, lower morale. We should not do that for all the right reasons.

Senator **Warner**. Mr. Chairman, my time is up.

Senator **Levin** [presiding]. Senator Dixon.

Senator **Dixon**. Thank you, Mr. Chairman.

F-15E

General Welch, the administration has proposed to terminate the F-15E after 1991. I would like to ask you three pertinent questions about that.

First, would this leave us with a force that meets the interrequirements for long-range interdiction in the post INF environment?

That is question one, and two, if the advanced tactical fighter is not available on time, what will be the shortfall of planes we need to fill the role of F-15E fighters?

And, finally, it seems that the F-15E program should be maintained until we have a new fighter that is available to replace it, and I wonder if you concur?

General WELCH. Well, certainly, in the best of all worlds we would maintain F-15E production until we could switch the money to ATA production. And the budget has driven us to accepting a gap between F-15E and ATA.

And it is purely a budget decision. However, we have another year to watch ATA, and if ATA proceeds on schedule, and we can be optimistic about it, then I will not be all that uncomfortable. But if we see considerable problems with that, then that will make that gap a lot wider than we have signed up for.

But the very short answer is, because of the budget, we have been forced to accept a very undesirable gap in the production of airplanes for that very important dual theater nuclear and long-range conventional interdiction role.

Senator DIXON. Can you give me any specificity about that—what the short fall is expected to be?

General WELCH. Well, of course, the cut was 36 airplanes, but that comes on top of an earlier compromise, where we cut 24 airplanes. So the cut, the total cut over the last two budget exercises—both of which occurred this year——

Senator DIXON. Let me do a followup. It is well known, of course, you are committed to maintaining a strong industrial base, as is this Senator. The end result of this budget will be to have just two fighter production lines operating, and I wonder how you assess that dicotomy.

General WELCH. I do not like that very much. I like two better than one.

Senator DIXON. Let me give you a final question here, and I think probably that will use up my time.

401ST TACTICAL FIGHTER WING

One, I asked Secretary Cheney yesterday—as you know, in 1987, the Spanish Government asked us to remove 72 F-16 aircraft of the 401st Tactical Fighter Wing base at Torrejon, Spain.

The United States originally intended to deactivate this wing and, subsequently, the United States and NATO collectively agreed to move this Air Force wing to a new base, to be constructed in southern Italy.

My understanding is this new base at Crotone will be a peacetime operating base for the 401st, like the Torrejon base was. And in the event of war, the F-16s in the 401st would deploy from Crotone, elsewhere, for their wartime operating location.

And my question is, if Crotone is going to be only a peacetime operating base, why could we not station these aircraft back here in the United States, and then deploy them directly from our country to their wartime operating location when necessary?

General WELCH. Of course, even though Crotone is a peacetime operating base, it still is in the southern region of NATO, which means it exercises every day with other forces in the southern region of NATO. It is the only U.S. Tactical Air Force presence anywhere in the southern region of NATO.

So even though they will not employ in wartime from there, they train from there with the rest of the NATO forces in peacetime every day. And that presence, I think, is very important.

Senator DIXON. If I have time for one more followup, Mr. Chairman?

NEW BASE IN ITALY

We built another completely new base in Italy for the ground-launched cruise missile. And the United States invested there about $160 million. I think NATO spent about $45 million. What are the plans for the use of this base now, and if the United States does not reuse this base, how much of the United States and NATO costs will be recovered, in your opinion?

General WELCH. I cannot answer the last question. I simply do not know. I will say that if we have a legitimate use for that base, then we will have access to the base. But, of course, the worst thing we could do would be to maintain something at that base just because we paid a lot of money for the base. Because then we are just throwing resources after those resources.

But I really do not know the answer, and I do not know if anyone does. If it is available, I will provide it for the record.

Senator DIXON. If you could, I would appreciate it. And I will ask one final one if they will let me indulge that.

[The information follows:]

COMISO, AB, ITALY

Under the terms of the Intermediate-Range Nuclear Forces (INF) Treaty, all treaty-limited items associated with the ground launched cruise missile (GLCM) must be removed from the European Theater and destroyed not later than 31 May 1991. [Deleted.]

FORCE STRUCTURE REDUCTIONS

With the force structure reductions under consideration in the Department, is there not a chance we could build a brand new base at Crotone, and then decide that the 401st should be deactivated, leaving us with nothing to put there?

General WELCH. Deactivating the only force we have in the southern region would be way, way down on my list of things to deactivate. It is a good place to train. The presence is important. It is a good location.

Senator DIXON. I thank the Chair.

Senator LEVIN. Senator McCain.

Senator McCain. Thank you, Mr. Chairman.

A lot of members of this committee, including myself are disturbed about the decisions that had to be made. I think in an overall context, one of the main reasons we are disturbed is because there has not been time to examine roles, missions, and commitments, and that the budget is being driven by these fiscal aspects.

I think some unfortunate and unwise decisions have been made and that they will generate a great deal of controversy, perhaps more than we have seen in recent years, as we proceed through the legislative process.

MIDGETMAN UNAFFORDABLE

I would like to start out by saying in this era of fiscal restraint, it is beyond me to understand why in the case of the Midgetman, we would consider one dollar, much less a $100 million, and in the long term, $15 or $20 billion on a system, whose only virtue is to give us a warning to a surprise attack, or that may play a peripheral role in arms control agreements. We simply cannot afford it at an estimated cost somewhere between $18 and $35 billion. It is beyond me, and I do not understand it. We cannot afford it. I will certainly do everything I can to see that this program is killed. The taxpayers deserve better.

V-22

General Gray, the Osprey has already received significant support here on the committee, as well as in Congress. Not only because of the formidable lobbying capabilities of the Marine Corps—attested to by President Truman many years ago, but mainly because the Osprey is the next generation in weapon systems. That, frankly, is what the United States needs to invest its money in, if we are able to maintain a military advantage. Like the Harrier, this program is fraught with controversy, but I think it deserves significant support.

B-1

General Welch, the Air Force is going to have to make a strong argument as to why we need to continue to pour money into the B-1, in order to maintain its penetrating capabilities. The American people and the Congress need to know how much more is going to be necessary in order to maintain that capability.

Very frankly, I have received different numbers than the ones the Air Force has. If we are talking about additional investments of $4 billion, $8 billion, $10 billion, I think we ought to look carefully at making the primary role of the B-1 bomber as a cruise missile carrier. It is already a very expensive aircraft.

B-2

In the case of the B-2, I think it is ample testimony that one has lived too long when one finds an airplane that costs in the range of $700 million.

F-14

Admiral Trost, I am concerned about the cut in the F-14, and the corresponding cut in the Phoenix missile that goes along with it.

One of the biggest arguments that we have been involved in in this committee, is having enough aircraft for the 14 carrier, or 15 carrier battle groups.

We will within a week or two, begin another debate as to whether the Navy has enough tactical aircraft for those carrier decks. To do away with the one aircraft that has the capability of defending the battle group in the outer air battle zone is something that I find not hard to understand. I hope you will be able to provide better information as to how we will be able to maintain enough tactical aircraft for the carrier decks, if we maintain a 14-carrier battle group, and also, how we plan to defend the outer air battle zone.

LHX

General Vuono, I think we are betting on the come when you, as the press reported, agreed to "buy back" the LHX program by giving up the Apache helicopter. The information that I have is that it will be at least 3 years before we have the LHX.

We have not had a weapons system in recent years that has come into production on the schedule envisioned in its early stages.

I think we are setting ourselves up for some serious consequences by reducing the Army's most effective self-deployable, anti-armor system at a time when more and better anti-armor capabilities are being demanded in the Army. Additionally, it seriously impairs, in my view, the LHX competition. This action prices the AH-64 out of the international market at a time when a number of countries—not the least of which is Israel, are very interested in buying the aircraft.

It leaves the United States and NATO without an attack helicopter for at least 3 years or longer. And it stops the modernization of the Guard and Reserve, now that the Active Army has their AH-64s.

APACHE HELICOPTER

I would be very interested, General Vuono, in asking why you felt that the Apache helicopter could be sacrificed at this time?

General VUONO. Well, first of all, Senator, the LHX will not replace the Apache as an attack helicopter. It is not an attack helicopter. It will augment the Apache in a scout attack helicopter role. It is technology of the future to solve one of our most significant battlefield deficiencies, which is seeing the battlefield.

Second, we are not going to shortchange Europe because of the Apache termination. We will still have 40 battalions of Apaches. We will still have them in the Reserve components.

We did have to sacrifice some of the out year buy of Apaches to provide resources for the LHX. It is my view that that was a prudent decision, based on the balance between near-term capability and future technology.

But the attack bird—the Apache, will still be the bird of the future with us. The LHX does not replace the Apache.

TERMINATION OF PHOENIX

Senator McCain. Admiral Trost, does the decision to terminate the Phoenix represent a change in the Navy's strategy for defending carriers?

Admiral Trost. Not at all. It is totally an affordability decision and it is premised on the success of the AMRAAM program coming along.

Senator McCain. So you believe that the AMRAAM program will meet the requirements in a timely fashion?

Admiral Trost. It will have the fire and forget advantage that other missiles do not. It will not have the range capability married up with the F-14 that the Phoenix offers.

Senator McCain. You are confident we will have sufficient aircraft to man 14 air carrier battle groups?

Admiral Trost. I am confident that we currently have sufficient aircraft to maintain the force, both in the 13 Active and the two Reserve air wings. However, the cuts in production, which have been addressed as a result of budget reductions, mean we will have shortfalls in the mid to late 1990s in our ability to maintain the force.

Senator McCain. My time has expired. Thank you, Mr. Chairman.

Chairman Nunn [presiding]. Senator Cohen.

Senator Cohen. Thank you, Mr. Chairman.

Mr. Chairman, yesterday I apparently spoke with delphic ambiguity. The Washington Post indicated in a couple of lines that I supported Senator Nunn's call for negotiations on short-range nuclear weapons in Europe.

The New York Times, by contrast, had me supporting the administration and blasting the notion of negotiations. And so I apparently demonstrated a verbal athleticism, which has allowed that dual interpretation. Which, I might say, has been the secret of my success on Capitol Hill for some time. [Laughter.]

Chairman Nunn. That is the ultimate skill in this business.

Senator Cohen. It is the Michael Jordan of Capitol Hill, I suppose.

WITHDRAWAL OF TROOPS FROM EUROPE

But Senator Warner asked a question of the panel, and I would like to phrase it somewhat differently. He asked you whether or not any of you would support the unilateral withdrawal of troops from Europe. I do not know that anyone suggested that yesterday.

I might point out there is some unilateral action being taken on the part of the West German Government right now, inconsistent with the consensus that is necessary to maintain NATO cohesion.

And so, I would point out that it is the West German Government right now that is striking out on its own, undermining the credibility of that cohesiveness.

But, let me ask it a different way.

General Vuono, you said that we should maintain our forces and modernize. Well, that is wonderful. I agree with you. But let me pose it separately.

Let us suppose that we do not modernize. Let us assume that the political pressure builds in West Germany and other Western European countries, such that the West Germans decide they want no nuclear weapons on German soil—the so-called triple zero.

And let us suppose the continued existence of SS–24s and SS–25s, some of which are targeted on Western Europe, and coincidentally, 300,000 men and women in American uniforms. And let us further assume that the SS–21 missile launchers have been doubled by the Soviet Union and the SCUD missiles have been deployed to replace the SS–23s.

Under those circumstances, would you recommend that we maintain the same level of forces in Europe?

General VUONO. Well, Senator, I do not ever anticipate those assumptions coming true.

Senator COHEN. Well, tell me which ones you disagree with.

General VUONO. First of all, I am not convinced that we are going to go to any kind of triple zero option. If that is the case, then I think my comments earlier about modernization are still valid and my comments earlier about continuing forward-deployed forces over there are valid.

Senator COHEN. So even if there is no modernization, and even if there is a triple zero achieved in Europe, you would say that we should maintain a similar force?

General VUONO. I said I do not believe we are going to go to triple zero, and I think we will continue to modernize.

Senator COHEN. What about the SS–24s and SS–25s being retargeted at European sites; the SCUDs replacing the SS–23s?

General VUONO. That still would not replace my position.

Senator COHEN. Well, you basically say that they are going to modernize.

General VUONO. I do not see any indication that they will not. Of course we deal in capabilities, not in intentions.

Senator COHEN. I am not sure I understand that.

General VUONO. I say, I do not see any indication that they are not going to continue their modernization.

Senator COHEN. You see no indication that the Western Europeans are not delaying, and will perhaps refuse to upgrade the Lance?

General VUONO. No. I was addressing the Soviet Union.

Senator COHEN. I am not talking about the Soviet Union. The Soviet Union is already modernizing. They have already put SS–21 missile launchers in. They have already put in SCUD missiles in replacement of the SS–23s. They are deploying the SS–24s and the SS–25s. They are going forward.

General VUONO. There is no disagreement there.

NATO ALLIANCE

Senator COHEN. They are doing precisely what they are allowed to do under the INF Treaty. The question is will the NATO alliance do what it is required to do to maintain a credible deterrent as we try to negotiate down the levels. That really is the question.

General VUONO. I think we must continue to press on to have that modernization as part of our overall strategy and NATO must continue to do that.

ABUSIVE TREATMENT IN PANAMA

Senator COHEN. General Vuono, there are a handful of reports that a number of American troops and their families have been receiving abusive treatment in Panama; a number of reports that Americans have been abducted, beaten, raped, and threatened with handguns held to their heads. And we have had a situation where 21 bus loads of American school children were stopped, unloaded at gunpoint on the pretext of a motor vehicle violation.

And I am told that just this week the Panamanian Defense Forces broke into a number of our servicemen's apartments with sledgehammers, smashing up furniture and intimidating the occupants.

And so the question I have, along the same lines, is about troop presence. Is it time for the Army to give consideration to moving SOUTHCOM headquarters and U.S. dependents out of Panama as soon as possible, while leaving behind present U.S. combat forces?

General VUONO. Well, Senator, the Army has the bulk of them, but all of us have forces in Panama. We are in frequent contact with the commander-in-chief down there, General Woerner, as these incidents unfold.

I must say, I think in some cases they are a little bit blown out of proportion in the press. But, nonetheless, in our contacts with General Woerner, we are continually assessing that situation. Of course, our primary consideration is the safety of our family members down there. There has not yet been any kind of proposal that would cause us to pull those troops back.

Senator COHEN. Then those reports are inaccurate that I just recited?

General VUONO. No, I did not say they were inaccurate, sir. I think that in some cases they may be blown out of proportion.

Senator COHEN. You see no danger then to the dependents. Let us assume that Mr. Noriega is able to carry off the election successfully through fraud or force or intimidation or corruption, and he remains in place. And we have the Panama Canal Treaty, requiring the turn over to Mr. Noriega of the canal in the near future. Do you see no danger to the dependents of servicemen in that region, if that is the case?

General VUONO. I think that we have taken the necessary security precautions to ensure the safety of our family members. If we get to a situation where I felt our family members were in jeopardy, I would be one of the first to recommend that we would move the family members out.

Senator COHEN. Thank you, Mr. Chairman. My time has expired. I had several other questions, but I thank the panel for its participation.

Chairman NUNN. Thank you, Senator Cohen.

I have got a couple more questions, but Senator Thurmond, I would be glad to defer to you if you would like to go ahead.

Senator **THURMOND**. Mr. Chairman, I appreciate it. I have got some people waiting for me.

MARINE CORPS PRIORITIES

General Gray, the Marine Corps has historically been the smallest service. In prior hearings, the Commanders in Chief indicated that their priorities were readiness, modernization, and then force structure. Would you give this committee your priorities for the Marine Corps, in view of the budget constraints that we face?

General **GRAY**. Our priorities would remain as mandated. Preparedness or readiness must be first. Readiness to do not only the maritime expeditionary missions and tasks that have been mandated, but also the mandated other missions or requirements as the National Command Authority or the President may direct.

And so traditionally, and again today, we put our premium on readiness. And within that construct, we have modified, refined and leaned up our force structure to do just that; increase our preparedness.

Senator **THURMOND**. As I understand you, you would accept the same priorities as the Commanders in Chief: readiness, modernization, and then force structure; or would you reverse any of those?

General **GRAY**. When you have a manpower or people-intensive organization that is demanded by preparedness, then one must continually seek that proper balance between force structure, modernization procurement, and the other fillers.

Senator **THURMOND**. The commanders felt that readiness would come first, modernization next, and then force structure, if they could not get what they wanted on all three. And I just wondered how you felt.

General **GRAY**. Well, I will take what we get and give you the kind of Corps you need. I do not know exactly the difference that they were driving at, sir.

B-1B

Senator **THURMOND**. General Welch, some have suggested that we avoid the cost of fixing B-1B ECM capabilities by making the B-1 a stand-off cruise missile carrier. What are the implications of such a course for both, our military capabilities and our overall force posture under proposed START counting rules?

General **WELCH**. Yes, sir. We do not need the B-1 as a cruise missile carrier, we need it as a penetrating bomber for some years to come. Aside from START, we need the penetrating bomber, and it is the penetrating bomber.

With START, it is absolutely imperative that it not be counted as a cruise missile carrier. If it carries only gravity weapons as a penetrating bomber, then it counts as one weapon. If it carries cruise missiles, it counts as whatever the cruise missile load is.

And we cannot attest to the sufficiency of the force that we would have left after the reductions if the B-1 is not a penetrating bomber. So as far as I am concerned that is a non-starter.

COST OF STEALTH BOMBER

Senator **THURMOND**. What is now the cost of the Stealth bomber?

General **WELCH**. Delaying the Stealth bomber 1 year in order to reduce concurrency raises the cost probably on the order of $3 billion. There is currently considerable disagreement among cost analysts as to where that exactly takes you.

I can tell you the then-year costs for 132 airplanes is somewhere between $70 and $74 billion, the total program cost.

Senator **THURMOND**. What do you estimate is the cost per plane?

General **WELCH**. At the present time, total program cost, adding everything in, all the development and everything else, it is in the neighborhood of $500 million.

Senator **THURMOND**. $500 million?

General **WELCH**. In that neighborhood.

Senator **THURMOND**. Now, do you conceive of any way we could better spend that $500 million, or do you feel that it is best spent on the Stealth plane?

General **WELCH**. In terms of the deterrence that we buy, I do not know of any better buy than the B–2. In terms of the ability to hold at risk targets in the Soviet Union, which is the essence of deterrence, it is a good buy. So, no, I do not know of any strategic deterrent investment that I regard as a better investment than the B–2.

Senator **THURMOND**. I want to thank you gentlemen for your presence.

Thank you, Mr. Chairman.

Senator **WARNER**. Thank you, Senator Thurmond.

UNILATERAL WITHDRAWAL

General, I would like to return to my question that my colleague Senator Cohen said was predicated on the assertion of unilateral withdrawal. Only in the House of Representatives have I seen any statement; the Senator from Virginia did not suggest that in his question.

Do you gentlemen have any thoughts as to how we break the apparent deadlock between the German Government, which says no modernization, and our President who takes the stance, that there should be no talks for the present time on the question of the third zero option and modernization. General Vuono, my top priority is not the political future of the Federal Republic of Germany, but the welfare and safety of the people from the United States over there fulfilling the NATO role.

At what point does the danger to those people become so unacceptable to you as the Chief of Staff that you go to the President and say, Mr. President, we have got to do something? What is the scenario that takes place?

General **VUONO**. Well, I think we are not near that point right now, Senator.

Senator **WARNER**. Well, describe the point, and then we will determine how near we are to it.

SOVIET MODERNIZATION

General **Vuono**. I would think that it depends on the rate of Soviet modernization. If we did not do any modernization, that would dictate when that point would come. I am just not in the position to state exactly when it would come, but I think it would depend on when it gets so out of balance that the risk becomes unacceptable to us. I would hope that does not happen.

Senator **Warner**. I understand your hopes.

General **Vuono**. I would hope that we would continue to do the kind of modernization that we believe is essential for not only our forces over there, but for the security of the Nation.

Senator **Warner**. Well, with the present status of forces, have we got a year or have we got 2 years? How much time do we have?

General **Vuono**. I just could not give you an accurate answer on that.

Senator **Warner**. The Goldwater-Nichols Act, at the time it was——

Chairman **Nunn**. Senator Warner, could I pursue one question along that line?

Senator **Warner**. Yes.

LANCE SYSTEMS

Chairman **Nunn**. General, let me ask you this question. How long will the current Lance systems be able to be maintained?

General **Vuono**. Well, we are following through with the improvement of the SLEP [Service Life Extention Program] of the Lance, which is making some modifications to it. The CINC has asked that we have the follow-on Lance in position by 1995, which means that we would have to get on with the research and development now.

Chairman **Nunn**. Can you keep the existing systems in place until that period of time? Is that the plan?

General **Vuono**. With the modification that we have to the existing Lance, yes.

Chairman **Nunn**. So, through 1995?

General **Vuono**. Yes.

Chairman **Nunn**. How long a range are those existing Lances?

General **Vuono**. Not nearly what the follow-on to Lance will give us. It is less than 100 kilometers.

FORWARD-BASED AIR

Chairman **Nunn**. What about your forward-based air? And this gets into General Welch's area. Are we modernizing our forward-based delivery systems for in-theater use?

General **Welch**. Yes, sir. And those programs seem to be well on track. We will deploy the F-15E, which gives you much longer range, a much more capable theater nuclear delivery capability, as well as long-range conventional interdiction. We are upgrading the F-111s. I think we have agreement now on the tactical air-to-surface missile, which will extend the capability of those aircraft.

Chairman **Nunn**. So we have vary formidable nuclear delivery systems for in-theater use from the air?

General **Welch**. Yes, sir.

OFFSHORE NAVAL COMMITMENTS TO NATO

Chairman **NUNN**. Now, what about the Navy? What about offshore naval commitments to NATO, Admiral? What do we have there?

Admiral **TROST**. Sir, our offshore commitments to NATO are not in that particular area. I cannot really discuss that further in open session.

BRITISH/FRENCH MODERNIZATION

Chairman **NUNN**. What about the British and French systems being modernized, General? Could you speak to that?

General **VUONO**. No, sir. Not to any great detail.

Chairman **NUNN**. Could you furnish that for the record?

General **VUONO**. We could furnish it for the record for you.

[The information follows:]

THEATER NUCLEAR SYSTEMS

The British have the Lance system and are expected to replace it with Follow On To Lance (FOTL). The current French system, PLUTON, will be replaced by HADES in fiscal year 1992. HADES is a mobile, self contained truck and trailer that transports 2 solid propellant inertially guided missiles. The missile will have a [deleted] with an accuracy of [deleted]. The missile is 287 inches in length, 39 inches in diameter and weighs 4,500 pounds. Total time for launch from a standby mode is [deleted].

OFFSHORE NATO COMMITMENTS

Chairman **NUNN**. Admiral, would you furnish in classified form the offshore NATO commitments? And I am speaking not strategic weapons as such, but offshore?

[The information follows:]

Offshore theater (non-strategic) nuclear commitments to NATO varies with the military alertness posture of the NATO forces. [Deleted.]

Recently the NATO Ministers of Defense have approved a Memorandum of Agreement (MOA) that implements the planning process for TLAM/N in support of the alliance. [Deleted.]

Chairman **NUNN**. Senator Warner, thank you. I am very much in favor of modernizing the Lance, but I think that we have, frankly, become so obsessed with one system that we are losing our broader perspective of the conventional alliance and nuclear deterrence. That does not mean this system is not important. But I think that we are getting things out of whack.

As I said yesterday, we are shooting ourselves in the foot, collectively, as an alliance here. I think we have to understand that you cannot defend a country in a way that they are not willing to be defended. The Germans have to understand that they do not have carte blanche to call all the shots; as long as American forces are committed there we need to have some say, so we get back to the alliance and the partnership.

Senator Warner, as I said yesterday, and I know you were not here at the time, we were very successful in the two-track system with the INF. We decided to modernize; the allies stuck to that. The Germans stuck to it in the presence of hundreds of thousands of demonstrators. We sometimes forget that there were, not just a few, but hundreds of thousands of demonstrators against the Pershing II and the ground-launched cruise missile.

And on the other hand, we stuck to the negotiating pattern, and out of that came modernization that we followed through with, and most people would conclude, a successful INF outcome. Now, the Germans are insisting on a one-track system; negotiation without a real firm commitment to modernization. The United States and Britain are insisting on a one-track system, which is modernization without negotiation.

In this dispute, we are both losing sight of the fact that our real big challenge there is to get that conventional balance in line, which has never happened. The nuclear weapons we have there are there because we have tremendous conventional imbalances. So in this dispute, as we both stick to the one-track system, we are losing sight of the big picture, which is the challenge to get the Soviet conventional threat down. At that stage, if that ever happens, and we have a long, long way to go, we have to then take a fresh look at the entire nuclear spectrum.

Senator WARNER. Would you yield a minute?

Chairman NUNN. Yes.

Senator WARNER. We have worked on this together for some time. I agree that in 1979 we did embark on the parallel tracks of modernization and opening up talks. That course brought the Soviets back to the negotiating table. We are on another parallel today with START negotiations underway and with the conventional talks underway in Vienna.

And during the course of INF debates, on the floor of the Senate, one of the conditions precedent for Senate concurrence with that treaty was that we not embark prematurely, on the third zero option at this time, or even entertain negotiations which could lead to that third zero option. That was but a year ago on the floor of the Senate.

Chairman NUNN. I agree with half your statement, that everyone said they were against the third zero option, including, to this day, we have almost unanimous view on that in NATO. I do not recall saying that we were never going to negotiate or even agree in concept to negotiate on any other nuclear weapons in Europe.

But it is my view that the administration, instead of concentrating on getting a German commitment on modernization which I think is the most important commitment, was willing to postpone that one, and at the same time, was not willing to talk about the concept of eventual negotiation.

Anyone who thinks that the Germans are never going to want to negotiate the thousands of nuclear weapons that can only hit Germany, just has not been in conversation with the German people or the German leadership. They are always going to have to tell their public in honesty that they do have some long-term vision about what is going to happen.

And I think that would be the case in any country where the short-range weapons can only hit Germany. That is why this Lance modernization is important, and the upgrade of our air-delivered systems is important, because those have longer range, and in my view, are more stabilizing. That message is being lost, though. The weapons we are really trying to replace are much more destabilizing than the weapons we are trying to replace them with, which are longer-range, and that includes the Lance, but not limited to the Lance.

Senator **Warner**. Mr. Chairman, again let us go back. It was just about a year ago when then majority leader Byrd took the two of us to meet with Mrs. Thatcher, Mr. Kohl, Mr. Mitterand, and others. And in the context of those discussions, predicated on passage of the INF Treaty, was the stipulation that the third zero option talks, talks oriented to the third zero option, would be postponed until such time as we got some results; certainly results from the talks on the conventional forces.

In other words, there was leverage over the Soviets that we would in good faith begin those talks and show some results from the conventional talks before we would consider the option of going into another scenario to discuss the possibility of a third zero option.

Chairman **Nunn**. I said yesterday very clearly that I do not favor the third zero option. And interestingly enough, Chancellor Kohl and the Germans have said they do not favor the third zero option.

There is a distinction between discussing the future of nuclear weapons in Europe and the third zero option. If we have so little faith in our own ability to negotiate that we think we are going to be in a position of a fellow who writes a note, "Stop me before I kill again," we do not have to agree to a third zero option ever. It seems to me we do not have much faith in our ability.

So I would agree with you on the third zero option. And I think that is one area where we all have agreement. But again, even that agreement is being obscured in the present debate. I just think we are going to have to take a fresh look at where we are going in terms of the alliance. And the worst thing that can happen to the alliance is if it just falls apart right when you have a real opportunity to do something about a conventional imbalance that has been there for a long, long time. We have not got our eye on the ball. That is my point.

Senator **Warner**. Well, my immediate concern is that we might lose the opportunity in this fiscal year to have the funds authorized and appropriated to continue the research and development for this modernization program.

Chairman **Nunn**. Well, you and I agree on that one.

Senator **Warner**. I hope that we can agree to continue at least to support the modernization program, subject to an outcome and the resolution of the apparent differences between the United States, Great Britain and the Federal Republic of Germany.

Chairman **Nunn**. And I think the Federal Republic of Germany needs to pledge in concept that they are supporting the modernization with firmer language than they have been willing to do. I made that point very clear yesterday. I am not endorsing the German one-track position. I think it is a mistake.

GOLDWATER-NICHOLS REORGANIZATION

Senator **Warner**. Let me proceed quickly to two wrap-up questions. First, I know, the chairman and I are quite anxious to determine whether or not, in the collective judgment of you gentlemen, there has been any loss of status as a result of Goldwater-Nichols reorganization, and in particular, any change in your role under the series of statutes whereby you advise the President from time to time on the military posture of the United States and your respective components in contributing to that posture? Has there been any deterioration, in your judgment, in your role as advisors to the President of the United States, as a consequence of the Goldwater-Nichols Act, General Vuono?

General VUONO. Not in my belief.

Senator WARNER. Admiral Trost.

Admiral TROST. I would say there is a change in status, but that was the intent of the bill. It was to take us out as equal partners as members of the JCS, and ensure that the chairman had primacy and consulted with us when he felt it appropriate, rather than on a mandatory basis. So, de facto, a change in status.

Senator WARNER. Well, there still remained the authority for you to go to the President, and you can take the initiative to go to him.

Admiral TROST. I am sure we have that authority.

Senator WARNER. General Welch.

General WELCH. I do not think it has done any violence whatsoever.

Senator WARNER. General Gray.

General GRAY. I have not really been around long enough to know whether I have gained or lost, but I do know that both the Presidents that I have served have given us and me plenty of opportunity to state what I thought was best.

RESERVE COMPONENTS

Senator WARNER. My last question relates to the Reserve components. In the face of the continuing budgetary reduction, there are those who recommend that we continue to transfer more and more capabilities and place even greater reliance on the Reserve components. Do you have a view with respect to the speed at which we are doing this and the point at which there is no return, and that we have got to stop and refocus the attention on the Active Forces?

General VUONO. Let me try that first. We made a decision in 1983, 6 years ago, that we would do just that when we capped the end strength of the Army, the Active component Army, and we have moved a number of missions into the Reserve components, both the National Guard and the Army Reserve, and have attempted to give them the commensurate resources to accomplish those missions in terms of equipment and training. I think we have been successful, in my view, in doing so.

Further, it is my view that I would look very carefully at any additional missions that we would move from the Active into the Reserve components; to make sure that if that is done, it is done prudently and it is done with the thought in mind of not overtaxing the Reserve components to accomplish those missions.

Senator WARNER. In other words, you think the Department of the Army has gone about as far as it should?

General **Vuono**. I think we have done just about all we can do. There may be some cases where we can do more, but I would look at them very, very carefully.

Senator **Warner**. Admiral Trost.

Admiral **Trost**. Well, Senator, prior to the current budget cuts and the further direction to put more units in the Reserves, we thought we had gone just about as far as we could. And I say that because we had, for example, 45 ships in our Naval Reserve Force, including 24 modernized frigates, which really just go in this coming year. And, because we were having difficulty recruiting sufficient numbers of TARS, full-time reservists who man the billets on those ships, and because our selected Reserve manning on the ships is at about 79 percent of requirements, meaning we augment with additional active duty full-time personnel, we have a lesser savings than that predicted.

We now are faced with inducting an additional 24 frigates, into the Reserve Force over the next 4 years which is a 100 percent greater frigate force, we are going to work hard at it. It is going to be quite a challenge, because we are going to have to recruit a lot more people. And we have to take into account the demographics which generally do not support the talent in the vicinities of those seaports where they have to be in order to make those ships viable.

Senator **Warner**. So there is a question mark over the viability of the program?

Admiral **Trost**. There is a question mark over the viability, but we are going to do our best to make it happen.

Senator **Warner**. And of course, there is the uniqueness of the fact that a ship deploys and it is difficult to maintain links with the family and the home base.

Admiral **Trost**. These ships will, of course, become non-deployable. That is right.

Senator **Warner**. General Welch.

General **Welch**. As you know, we have, since 1977, the founding of the total force concept, steadily moved missions to the Reserve Forces, and we continue to do it any time it makes economic or operational sense. The very fact that we have been doing it for that long would tell you there are not any homeruns left to be hit in that area. There will be some modest opportunities to continue to do that, but I do not see any massive additional opportunities.

Senator **Warner**. So you have about hit your end, optimum point?

General **Welch**. We have got to the point where anything in the future is going to be modest opportunities that spring up.

Senator **Warner**. General Gray.

General **Gray**. Well, our situation, of course, is a little different. It does not lend itself to the preparedness and all of that. We have streamlined it pretty much already. We continue to look for opportunities to refine that even more, but again, there are not any bold changes that could be made.

Senator **Warner**. I think a commendation is in order for the Reserve and Guard though. They have helped out enormously, in view of the fiscal constraints that we have had for 5 years.

And I thank the panel and thank the Chair.

Chairman **Nunn**. Thank you very much, Senator Warner.

Let me ask each of you this question, and I will probably make this my final one. But it gets right down to what we are going to be faced with this year. Several weeks ago the combatants commanders testified before this committee. When asked to choose between larger forces with lower readiness and smaller forces with higher readiness, as well as sustain modernization, every CINC that testified came down in favor of small forces that were combat ready.

READINESS VERSUS SIZE OF FORCE

I would like to ask each of you if you agree in general with that priority? General Gray.

General **Gray**. In our position, no, I cannot agree with that total. We have to have a certain amount of forces to be fully prepared and ready. So it is a little difficult for me. It is nice to say smaller forces, more ready, and all that. We are pretty small now. We do not even show up in the pie chart. And so I am pretty comfortable with the balance that we have, sir.

Chairman **Nunn**. General Welch.

General **Welch**. I think if that question were asked a little differently you would get a different answer. If the question were asked, are you willing to have smaller forces in your theater, then you might get a different answer. Because I have never seen a CINC who would accept any force cuts in his theater. He is quite willing to have overall force cuts, but not in his theater.

We have taken very, very significant force cuts in the Air Force as you know. As I said earlier, we are cutting 33 squadrons of aircraft of all kinds. We have cut 37,000 people, so we obviously opted for a smaller force to maintain readiness.

But you do not find the kind of money that we have been forced to cut out of the budget these last two cycles by further cutting of forces. You cut one fighter wing over the entire FYDP, you save about $700 million. That, for an entire fighter wing over the entire FYDP. And so you can see, to find this kind of money, you would have to eliminate the fighter force. So that is why we have to go to the big modernization programs, having done what we have already done in order to make the kind of cuts——

Chairman **Nunn**. So the cuts are too big to simply make it that kind of choice?

General **Welch**. That is correct. Yes, sir, that is my view.

Chairman **Nunn**. Admiral Trost.

Admiral **Trost**. I guess I would have to say that in general we all agree we would rather have ready forces, regardless of size, compared to something that is not ready to do the job.

I would certainly agree with General Welch. I note specifically, and I will do that without naming the CINC, that we have CINCs who will support reductions, in forces—or let me say they will not speak up against reductions in forces, but then will say, of course, I will continue to meet those commitments in my theater.

And therein lies the true disconnect. When the force sizes, no matter how ready, get too small to meet those commitments that are laid upon them by outside authority, we simply stretch our people, and we lose them, and the ready forces are no longer ready.

Chairman **Nunn**. General Vuono.

General VUONO. Well, I frankly think that both my colleagues here have put it in the right frame of mind. You know it is tough to strike that balance. And what we have tried to do in the Army is strike the balance of quality of the force and the readiness of the force. In order to do that, we said we would slow modernization and minimize force structure cuts. We have had to take force structure cuts the last couple of years, about a division's worth out of the force, not to mention the civilians that we had to take out.

I believe that my priority is obviously the quality of the people and the readiness of the force. I would say that we are as small as we ought to be right now, and any further reductions would increase our risk and would further slow modernization.

FORWARD-DEPLOYED FORCES

Chairman NUNN. Generals and Admiral, thank you for your testimony. I have just one other question, General Vuono, along the same line. At what point, in terms of the reductions of force structure, where we are now or where we might be going in the future, what point do you generally have to begin to consider seriously reducing overseas deployments in order, with a smaller force structure, to be able to maintain the rotation base and the training base that you need here?

General VUONO. Are you talking about the forward-deployed forces?

Chairman NUNN. Yes. At what point do you reach the situation where, not for philosophical purposes or burdensharing or mad at the allies or disputes over Lance modernization, any of that, I am just saying from a pure internal management of the Army training base, rotation base, how much further can you go in force structure reductions without making some changes in the forward-deployed forces?

General VUONO. I will give you details of that for the record, the specifics, but I would say that we are rapidly approaching that point.

[The information follows:]

FORCE CUTS

Army force structure requirements cannot be assessed on the basis of pure internal management of our training base or rotation base. Army force structure requirements are based on the threat; the national military strategy to counter the threat; the employment doctrine of our forces, and available resources. Our forward deployed forces represent the most visible demonstration of our Nation's strategic policy to deter conflict. As a result, any decision to reduce force structure, whether the reduction is in forward deployed or CONUS-based forces, must be weighed against the increased vulnerability and the associated risks a reduction would create.

Chairman NUNN. Have we reached it now?

General VUONO. No, we have not reached it yet. If, in my view, I thought we had reached it now, I would not have made the recommendation on where we took this latest cut, which as you know, we took a portion of it out of CONUS. We have not reached that point yet.

INF PHASING OUT

Chairman NUNN. Maybe I am under an erroneous impression, but I understood the Army actually recommended more reductions in Europe than the Secretary went along with.

General VUONO. No, sir.

Chairman NUNN. Relating to the INF withdrawal?

General VUONO. No, that is not the case.

Chairman NUNN. Based on the INF phasing out, what are your recommendations?

General VUONO. Yes, sir. Because we had discussions with General Galvin in terms of what portion of that INF backfill we needed to put in there for combat service support enhancement and some other things. He needed a portion of it. So we put that in Europe with his complete agreement, and then took the rest of it out of CONUS.

Chairman NUNN. General Welch, it is probably not quite as applicable to the Air Force, but also that same question has a bearing on the Air Force. I will ask you the same question, generally.

General WELCH. Oh, I think it is very much applicable to the Air Force, Senator.

Chairman NUNN. Just as much as the Army?

General WELCH. Oh, yes, sir. In the tactical airlift mission we are there. Our CONUS/overseas ratio for active duty tactical airlift puts us there. The only way that we could further reduce forces in the CONUS would be to draw down the Reserve components that do not participate in the rotation.

We are within a couple of squadrons of being there in the tactical fighter forces for the same reason. We have moved so much of the tactical fighter force into the Reserves over the years, a third of it, and of course, only the Active Force supports that rotation, we are there in the tactical fighter forces, or within a squadron or two.

It does not apply to strategic airlift, of course. That is not a problem there. It does not apply to strategic forces. But in those two important——

Chairman NUNN. In tactical airlift and in tactical fighters, we are already there.

General WELCH. That is correct.

Chairman NUNN. Additional force structure reductions in the Air Force would necessitate bringing some of the forces back home?

General WELCH. Anything significant would.

Chairman NUNN. And we are almost there with the Army?

General VUONO. Yes, but not yet.

Chairman NUNN. But close? I do not know whether the question would apply—I know it does not apply equally with the Navy and Marines, but I would ask the same question to the Navy and the Marines.

Admiral TROST. Well, in the case of the Naval Forces, our concern under present conditions is the deployment base, the ships from which you draw your deployers. My biggest concern, and the one that will probably lead to the cries of complaint from the CINCs by the end of this fiscal year, is that over the next several years we will, in fact, take out 56 surface combatants from that deployment base. We will take out one of the carriers that was planned for that base, and that is bound to have some impact on our ability.

As a matter of fact, it will have a substantial impact on the numbers of surface combatants we forward deploy. It has an impact on our ability to meet our drug enforcement commitments with adequate numbers of forces, without unduly impacting on the people we want to keep in the Navy for the long term.

So we will tailor our force adjustments. Our fleet commanders are working on proposals to that effect to comply with the current cuts. And I guess you will start hearing from the CINCs about the end of this fiscal year.

Chairman **Nunn**. General Gray.

General **Gray**. I would agree. It does not apply to us in that way as you well know, Senator. But looking at it in the larger sense, as a member of the JCS, I would support what you have heard here in total. I think that in the next cycle, i.e., the POM 92 development process which has already started, we are going to have to take a hard look at our global posturing of forces for all the reasons that have been proffered, where we are with START, where we are with conventional arms talks, what the strategy looks like, and the revised strategy.

Clearly, though, if we can do this in some kind of a synergistic process, then I think we will gain the most. That is why I recommend that we not make any drastic decisions this year, force structure-wise, which would take away some of your options in this next cycle. But, I think in the next cycle we have got to come to grips with this.

Chairman **Nunn**. We have got to start thinking about these things.

General **Gray**. That is right, over the long haul.

Chairman **Nunn**. By the next cycle, you really mean the next budget?

General **Gray**. Yes, this coming summer, that is right. The 1991 and certainly the 1992 process, we are going to begin putting together now. We have to look at, I think, the roles, missions, posture, the whole thing.

Chairman **Nunn**. Thank you all for being here. I am going to have to depart, but I am going to leave you in the kind and gentle hands of Senator Levin.

Did you have any other questions?

Senator **Levin** [presiding]. Just a few questions.

RAIL-GARRISON MX

On the rail-garrison MX, is it the plan to move the railroad cars only in time of crisis or is the recommendation we read about at the Defense Science Board going to be part of this plan to move them regularly?

General **Welch**. There is nothing in the design of either the system or the command-and-control system that drives that one way or the other. The current concept calls for using training trains only on the rails, but leaves open the option of deploying for exercises if that is what someone decides we ought to do.

So I guess the answer is, the current concept is rails for training only, whether that be daily use of training trains or whether that be an exercise of some kind.

Senator LEVIN. That is, without missiles on them?

General WELCH. Well, the exercise could be with or without.

Senator LEVIN. But the current concept?

General WELCH. The current concept does not call for any continuous roving, but nothing precludes that decision.

Senator LEVIN. Do you believe that concept is likely to change in the next year or so?

General WELCH. I can see no reason to change that concept unless there is a concern in the country about the state of tensions in the world.

Senator LEVIN. So that under the current concept at least, the trains with the missiles on them would be in garrison?

General WELCH. That is correct.

Senator LEVIN. Are they in garrison, survivable against a "bolt-out-of-the-blue" attack?

General WELCH. No.

Senator LEVIN. Are they hardened at all against that kind of an attack in garrison?

General WELCH. Well, of course, no system is. The answer is no, and neither is any other system.

Senator LEVIN. Are the current MXs in silos hardened at all?

General WELCH. They are hardened, but the Soviet hard-target capabilities begin to remove that distinction.

Senator LEVIN. But they are harder in silos than they would be in trains?

General WELCH. Absolutely. Harder, assuming they could be targeted.

Senator LEVIN. Assuming that they are not moving and the garrisons are targetable, they are harder then in silos than they would be in those trains?

General WELCH. Against——

Senator LEVIN. A "bolt-out-of-the-blue" attack, a surprise attack.

General WELCH. Well, that depends on what is aimed at it.

Senator LEVIN. Assuming it is aimed at the garrison and aimed at the hole.

General WELCH. Well, the reason why I am hedging that a little bit is that if the follow-on SS–18 is targeted against the silo or targeted against something in garrison, it does not make all that much difference. It is still going to be very effective.

So the point is that in order to continue to ensure the survivability of land-based ICBMs, they have got to be out moving.

Senator LEVIN. Did it make any sense for us to invest in hardening the silos for the MX?

General WELCH. There is continuing research, and continuing research makes sense, but we do not see the promise of defeating the follow-on SS–18 at the present time with that approach.

Senator LEVIN. No, my question was we did invest in hardening of the MX in silos?

General WELCH. Yes.

Senator LEVIN. And did that investment make any sense in light of the accuracy of the SS–18?

General WELCH. Well, certainly that investment greatly reduces the numbers of threats that can address the silos. And that investment bought a considerable amount of time. We do not have the follow-on SS–18 yet.

B–1

Senator LEVIN. I think you have been asked about the B–1 cost. What is the amount in the budget for the fix of the B–1?

General WELCH. OK, there are two categories of funding requested for the B–1B. The first, is the funding requested to complete the baseline system; to complete that which we advertised as being within the 20.5. And to complete that we have a request for $489 million to install the autonomous radar warning receiver system; and about $250 million to complete the depot equipment that had been deferred. That completes the baseline system, and that would take us to 20.88 baseline cost, or $380 million over the 20.5 cap.

So we are asking for new appropriations in that amount for those purposes, and a relief in that amount from the 20.5. In addition, we are asking for funds to incorporate the SRAM II, a new weapon, which must be incorporated on some bomber; and also to install the MILSTAR terminals, which will go in all strategic systems. That is why we have those sorts of things. Those are new capabilities, that are not in the baseline system.

So the total new appropriation that we are asking for, for the entire FYDP, to include those baseline systems I described, plus the additional, is $1.43 billion. And that is the extent of the Air Force's desire over the FYDP to improve the B–1 bomber.

Senator LEVIN. Just on the baseline system cost, is that a fix of something that did not work as projected, that $380 million?

General WELCH. The $489 million is indeed. It is to compensate for our inability to get the integration that we had hoped for in the ALQ–161.

Senator LEVIN. Is that something which we are going to hold the contractor responsible for? Are we going to switch contractors?

General WELCH. No, sir. That is not within the Eaton AIL contract. That is an additional requirement that the Air Force has determined we need to compensate for shortcomings in the ALQ–161.

Senator LEVIN. In the design of it?

General WELCH. Probably.

As it turns out, there is enough blame to go around. As it turns out, the initial requirement was probably not achievable. And the contractor signed up for the initial requirement, and it turned out the contractor could not achieve it.

In other areas, there are, in my view, things that were achievable, and the contractor just was unable to manage to meet those requirements.

CONTRACTOR LIABILITY

Senator LEVIN. Now, where a contractor signs up for the requirement and cannot achieve it, can we hold that contractor responsible for that?

General **Welch**. Within the limits of liability in the contract.

Senator **Levin**. Are we doing that in all cases?

General **Welch**. Yes, sir.

Senator **Levin**. So in all cases we are holding contractors, who signed up for these requirements, accountable to achieve those requirements?

General **Welch**. Within the limits of the ceiling in that contract, that is right. Within the limits of his liability in the contract, that is right.

Senator **Levin**. Is he not liable to produce it?

General **Welch**. He does not have unlimited liability, no, sir.

Senator **Levin**. So the contract puts a limit on that liability.

General **Welch**. That is correct.

Senator **Levin**. Would you furnish for the committee, then, the limits on the liability of the contractors that are in those contracts; limits on the cost of achieving these requirements in the event that the contractor did not produce them?

General **Welch**. I will provide information for the record on the limits of liability, yes, sir.

[Information will be retained in committee files.]

Senator **Levin**. Just a few more questions.

"BOLT-OUT-OF-THE-BLUE" ATTACK

You and I have had discussions in the past over the MX and Midgetman. You and I have had discussions in the past about the various scenarios. And I think you testified last year that the "bolt-out-of-the blue" nuclear attack would be an irrational act. And we had some correspondence, I think, after that testimony.

Would you agree that just as a "bolt-out-of-the-blue" attack on us would be an irrational act, that an attack upon us after our forces were generated would also be an irrational act?

General **Welch**. This is a little deja vu.

Senator **Levin**. I am going to keep trying on this one.

General **Welch**. I think that what—you have just redefined the definition of what one might expect to be rational. The "bolt-out-of-the-blue" is, by definition, in absence of any international crisis. And in absence of any international crisis, you would expect people to very carefully weigh the possible gains and losses.

But we both know too much about history to expect that in crisis you can count on that degree of rationality. So certainly, I would agree that an attack after generation is certainly at least as irrational as an attack before generation. But, by definition, the generation accompanies a crisis. And I do not have that much faith in the rationality of human nature in crises that I cannot define.

Senator **Levin**. So that as I understand then what you are saying, even though they are both irrational acts, that it would be more likely for an irrational act to be perpetrated, carried out against us, in a crisis situation than in a non-crisis situation?

General **Welch**. I think what I would say is it takes a higher degree of deterrence to prevent an irrational act as the pressure on all the players builds up. I would have to agree wholeheartedly, all war is irrational.

Senator **Levin**. Would you say that our capability to generate 8,000 survivable warheads in a crisis raises the level of deterrence right now?

General **Welch**. Oh, absolutely.

Senator **Levin**. So that right now we have a higher level of deterrence in a crisis than we do in a non-crisis?

General **Welch**. Certainly.

SDI

Senator **Levin**. Just one additional question, General Welch, and this has to do with SDI. Do you believe that the United States should commit itself now to deploy an SDI system if it is technologically feasible to do so, regardless of what it might cost, regardless of treaty constraints, and regardless of Soviet potential countermeasures? Should we make that commitment now?

General **Welch**. Well, that is a hypothetical question, that I can conveniently duck, because we do not have the information, we do not have the technical work done, and we do not have anything like the confidence in our information to make such a decision now.

When we reach the point where we can do that, and presently, our estimate is that it will be sometime after 1992, 1993, before we have completed the technical work that would give us the basis for making the deployment decision.

Certainly, when we reach that point in time, all of those things you discussed have to be weighed. We have to weigh where we are and what the impacts are of the ABM Treaty. And we have to weigh the total cost of that system, which we do not yet know.

I think we are on exactly the right path, Senator, to get to that decision. And I do not think there is any basis for making that decision today.

Senator **Levin**. I could not agree with you more. I think if you read some of the testimony though, before the House Armed Services Committee, you will see that there was an appearance of making a commitment to deploy SDI as soon as the capability was there, and made no reference whatsoever to costs, countermeasures or other factors, which have to be considered when you know them.

So I am happy to hear what you are saying today, and I think that is a much more balanced and common-sensical approach to the issue.

Well, if none of my other colleagues have questions, we thank you all for your coming forward as always, and we will stand adjourned.

[Questions for the record with answers supplied follow:]

Questions Submitted by Senator Sam Nunn

SURVIVABILITY OF BOMBERS AND SICBM

Senator **Nunn**. General Welch, what would be the implications for the survivability of our bomber force, and in the next decade, the survivability of the road-mobile Midgetman force if the Soviets acquire a depressed trajectory SLBM capability?

General **Welch**. A depressed trajectory SLBM implies a preemptive attack possibility. Due to the retaliatory capability of the U.S. Triad, such an attack is as irrational under a non-generated state of readiness as it is under a generated state. We do not believe preemptive preparations can be completed without detection by our surveillance systems, nor will it become a credible threat in the foreseeable future. However, should the intelligence community assess that the depressed trajectory SLBM is a viable threat, we would change aircraft operational procedures to minimize its effect. Additionally, the Small ICBM's road-mobile feature was specifically designed to allow immediate dispersal on short warning. We are confident the Small ICBM will achieve its survivability objective.

PROGRAM IMPORTANCE OF INTERNATIONAL MILITARY EDUCATION AND TRAINING

Senator **Nunn**. For all of you, Admiral Crowe recently testified that the International Military Education and Training (IMET) Program was probably the most cost effective security assistance program and that he would favor switching IMET to the Defense Department's budget.

Do you agree with Admiral Crowe's statement? Are you satisfied with the overall funding levels for security assistance, including the IMET program?

General **Vuono**. Yes, I concur with the Chairman's assessment. IMET is one of our most effective security assistance tools, and I agree that inclusion of the IMET program within the DOD budget warrants consideration. However, our security assistance and related efforts to support allies and friendly countries to improve their security are not as effective as they could be due in large part to consistently inadequate funding levels. I would also observe that the requirement to "fence" much of the security assistance budget coupled with the numerous cumbersome restrictions further retards the flexibility and efficiency of our foreign assistance efforts.

General **Welch**. I agree completely that IMET is the most cost effective security assistance program. IMET programs not only improve the capability of our friends and allies, but they also expose future leaders to democratic institutions. There are any number of specific examples of the benefits to democracies of that exposure. Current reduced IMET funding levels and drug earmarking of IMET funds have reduced the number of IMET students currently trained from previous years. In addition, it is increasingly difficult to provide Undergraduate Pilot Training (UPT) under IMET. The $47.4M IMET program in fiscal year 1989 funds programs for approximately 100 countries. Country funding levels are further divided among their foreign military services. It requires a major portion of many foreign air force IMET allocations to fund one student in UPT.

The Air Force is not satisfied with the current security assistance funding levels. We wholeheartedly support the administration's proposal to increase overall security assistance funding. Funding for military sales financing has declined by over 26 percent since fiscal year 1984, while the percentage of funding earmarked has increased from 49 percent to almost 94 percent. Consequently, funding available to non-earmarked countries has declined by over 90 percent over the same period of time. As a result, funding to numerous countries had to be zeroed-out and drastic reductions taken in funding for the remaining non-earmarked programs. An increase in IMET is also required to help make up for shortfalls in professional military education and training.

Admiral **Trost**. I agree with Admiral Crowe that IMET is an extremely effective Security Assistance Program. It allows the U.S. Navy to further Navy-to-Navy relationships and U.S. influence. Numerous graduates from our War College, Postgraduate School and other professional military education training centers are now serving in influential positions all over the world.

The Navy is concerned with the declining funding levels and trend toward earmarking that has reduced the funding available to non-earmarked countries by close to 90 percent since 1984. Unified commanders have lost flexibility to deal with worldwide requirements and are restricted in their ability to carry out the goals of the IMET Program. It is extremely difficult to carry out any meaningful program that would maintain and enhance good relationships with potential leaders in non-earmarked, less developed countries. I support the administration proposal for increased Security Assistance funding and recommend that the whole issue of earmarking be closely examined.

General **Gray**. Yes, I agree with Admiral Crowe's statements. IMET is certainly the most effective security assistance program the Marine Corps participates in. We trained 266 foreign students in 1988 and anticipate training another 272 in 1989. The impact of the IMET program is far reaching and the return value to the services and USG is infinite. The responsiveness of the program could be enhanced by having it fall under DOD budget.

Security assistance funding is presently at an acceptable level although I believe a review of the funds distribution is in order.

STRATEGIC C^3

Senator NUNN. Admiral Trost, the nation has been spending significant sums of money on improved command, control and communications to our ballistic missile submarines, ranging from ELF to new TACAMO aircraft. Some have argued that we should also direct the Navy to proceed with development of the SLCSAT, or blue laser satellite communications program. What in your judgment is the reliability and timeliness of National Command Authority communications to our SLBMs? Is it beginning to approach that of ICBMs? How urgently should we be pursuing the SLCSAT as an additional redundant link to SSBNs?

Admiral TROST. The Navy meets current JCS reliability requirements for Emergency Action Message (EAM) delivery to SSBNs in all phases of a nuclear war. Our connectivity reliability equals that of the ICBMs.

With respect to timeliness of delivery, speed of delivery is very scenario dependent and also depends on the location of the SSBN. Under all the current planning scenarios, all SSBNs will receive the EAM in sufficient time to carry out their assigned SIOP mission. This is continuously reconfirmed by peacetime testing and exercises and by computer analysis of communications in stressed environments.

The Navy continually works to upgrade communications to SSBNs to meet projected requirements. ELF and the new TACAMO aircraft, with its programmed block upgrades, are part of this ongoing process. The combination of planned Navy and joint Navy/Air Force strategic connectivity improvements should meet projected requirements at an affordable price.

A Satellite Laser Communications (SLC) system that would provide the required capabilities and reliability is under development. This technology, while promising, remains at an immature stage. Deployment of a viable SLC system is not seen as possible until after the year 2000.

COMMAND OF ARMY RESERVE FORCES

Senator NUNN. General Vuono, I understand that a study is underway to determine if Army Reserve units should continue to be assigned to and in the chain of command of Forces Command or should report instead only to the Chief of Army Reserve.

Since Army Reserve units are and have to be assigned to Forces Command as a specified command in accordance with the Goldwater-Nichols DOD Reorganization Act, it would seem inconsistent to remove those units from the command of Forces Command as an Army Command.

What are your views on this?

General VUONO. We have just begun a study of this issue and General Richardson (retired—former Training and Doctrine Commander) is chairing the study group. I believe we need to fully explore this issue to ensure we have the right command and control of Army Reserve Forces.

ICBM TEST

Senator NUNN. General Welch, does the Air Force have any requirement to test its ICBMs at depressed trajectories? If not, would you recommend that the United States attempt to negotiate a mutual ban on such testing with the Soviets in START?

General WELCH. Depressed trajectories are somewhat difficult to define in a consistent manner. For a given range, there is one trajectory that requires the least amount of energy to fly, called the minimum energy trajectory. Technically, any flight path below the minimum energy trajectory is a depressed trajectory, but until the flight path is significantly lower than the minimum energy trajectory there is no appreciable reduction in the time of flight. There is no clear definition of which trajectories are depressed enough to be of concern.

ICBMs in general do not have the capability to fly depressed trajectories that substantially reduce flight time. Slightly depressed trajectories that our ICBMs can fly do not shorten the flight time significantly, but do provide necessary operational flexibility.

Since ICBM depressed trajectories are difficult to define in a meaningful, unambiguous and useful way, it would be very difficult to negotiate and verify a ban on them.

Questions Submitted by Senator Carl Levin

FORCE STRUCTURE, MODERNIZATION, AND READINESS

Senator Levin. We are all aware that the President's new budget will make significant cuts in the defense area. Recently, Admiral Crowe stated that in order for NATO to be able to mount a well-founded defense against a determined Soviet campaign, the alliance needed (1) large numbers of well trained forces, (2) modern weapon systems, (3) adequate inventories of sophisticated conventional munitions, and (4) sufficient combat logistic support.

In the present budget environment, and with our present force posture, can we meet all of these needs?

Which of these four elements are of a lesser priority?

General Vuono. The amended budget reflects a fifth year without real growth for the Army. Given the many competing economic and social priorities, it is as fair and balanced as we could make it. But it is not adequate. The price of reduced defense spending is, in this case, an increased risk to our national security.

With reduced spending we are increasing the already substantial risk that a smaller force structure (now the smallest in four decades) might prove inadequate in a major war or in response to a contingency. We are accepting the risk that the support to our forces in the field might prove inadequate in time of crisis. We are accepting the risk by reducing the acquisition of a number of important combat and support systems. The inevitable result is an uncomfortable degree of risk to the Nation's defense and to its future.

Our highest priority in the present and future is to maintain essential levels of readiness. A key component is recruiting and retaining quality soldiers. Readiness encompasses tough, realistic training and the development of competent, confident leaders. High quality gives us the ability to get the most from the relatively small size of our forces and the flexibility to conduct operations across the full spectrum of conflict anywhere in the world, anytime. In allocating our readiness funds, the Army provides a clearly visible deterrent in addition to meeting the highest priority needs of the CINCs, particularly for forces that are deployed forward or are needed for rapid reaction to contingencies around the world.

Our next priority is a combination of modernization, sustainment, and force structure. All are needed in the right proportions to produce the trained and ready Army the United States needs to deter adversaries and act in contingencies. I believe the budget has the right proportions for the level of resources we have been given.

NATO DEFENSE

General Welch. Within current fiscal realities, we are meeting those needs to the best of our ability. Those needs translate to readiness, sustainability, modernization, and force structure. There are certain core needs within each that must be filled. When these are met, we can argue the priority of remaining requirements. But in my view, to present a credible deterrent, readiness must continue to be our first priority. It is essential to field a high quality force, not just in terms of equipment and logistical support but in terms of the kind of people we retain on active duty. The sustainability of our forces follows.

The United States cannot afford a hollow force, particularly for our forward deployed forces. Therefore, it is essential to have the wherewithal to sustain a conflict, especially in Europe. Sustainability further permits time to activate our industrial base and mobilize reserves.

Modernization of weapon systems is also vital to enhancing our warfighting capability. We must continue to ensure the acquisition of affordable, high quality and effective weapon and support systems. This is crucial to helping reduce risk by overcoming the quantitative gap between United States and Soviet forces should war occur. Modern forces provide more deterrence and combat capability than larger but less ready and modern ones.

The budget reductions of the past five years have made it impossible to meet these requirements, while sustaining force structure. Therefore, over the period fiscal years 1986–90, the Air Force has reduced its forces by 32 combat squadrons and over 40,000 people. Given our global responsibilities, however, we have gone about as far as we can go toward reducing forces.

FORCE STRUCTURE, MODERNIZATION AND READINESS

Admiral Trost. Our current military strategy calls for deterrence of conflict through forward operations in coalition with our allies. Fiscal reductions require that we make difficult trade-offs accepting that some operations must be conducted sequentially, that we will fight on the strategic defensive in some theaters and that, in peacetime, we might not be positioned to respond immediately to tasking from the NCA.

The fiscal reductions of the President's current budget can be accommodated within the framework of our strategy with a prudent degree of risk. The President's National Defense Strategy review stated that relying on a decrease in the likelihood of war to reorder priorities from preparing for war in the near to mid-term to developing better capabilities for the future runs two risks. One risk is that we would not recognize or respond early enough to an increase in the likelihood of war. Significant changes in defense spending long before a specific crisis was at hand might prove politically difficult. The second risk is that, while low, the chance of a crisis boiling out of control is not zero. Since NATO's capabilities affect Soviet propensity to use force, cutbacks in force posture and readiness could increase the probability that a crisis would lead to war and would increase the dangers to the United States should it happen.

Senator LEVIN. A recent editorial in the New York Times criticized the administration's approach to reducing the defense budget. It stated, "Their approach . . . would . . . degrade military readiness and push up the cost of each weapon produced." Rather than eliminating or trimming across the board some weapon systems, or stretching out others, the editors suggest the adoption of the John Lehman model which would place about one-third of the present active duty forces and their equipment in the Reserves. According to the editorial, this "would yield substantial savings . . . [and] leave in place active forces—fully equipped and trained and ready to be deployed and filled out with reserve units."

What is your reaction to this proposal and how much do you think we could save from enacting the Lehman suggestions?

Admiral TROST. Any major shift in the Navy's Active/Reserve mix should occur only if there are equally significant shifts in national military strategy and concomitant changes to the Navy's missions and tasks. We must have adequate numbers of active ships to meet our normal peacetime commitments, reinforced by a highly trained, well equipped, combat ready Reserve component available for use in crises or in the event of war. Putting ships in the Reserve and then having to man and operate them like active ships in order to meet normal peacetime requirements would not be cost effective since savings accrue because of reduced manpower operating costs.

It should be noted that transferring ships to the Naval Reserve is not as simple as it may appear. Over the last seven years, Navy has replaced the older, less sophisticated World War II vintage DDs in the Naval Reserve with 22 modern ASW frigates (FFG-7 and FF-1052 class). While the transition has been successful, it has not been without significant problems. The technological advances of the newer ships over the older DDs created critical reserve manning shortages. Selected Reserve demographics limit our choices of homeports for NRF ships—to be cost effective, there must be a pool of veteran sailors with the correct rate/ratings near NRF homeports.

Beyond these problems, there is another factor that must be considered in determining the Active/Reserve mix—the availability of Reserve assets. If Navy invests scarce resources to man and equip the Reserves, and places a sizable portion of its warfighting capability in the Naval Reserve, it is imperative that the operational commanders have immediate access to those assets for use when required. Today, for a variety of reasons, the availability of Reserve assets is limited.

I am satisfied with the current mix of Active/Reserve manpower in the Total Force (80% Active/20% Reserve) since this balance effectively supports the Nation's forward military strategy. If there are shifts in strategy which result in changes to Navy's peacetime commitments, changes to the Active/Reserve mix would be considered.

General GRAY. Yes, we can presently meet these needs. As you know, our commitment to NATO is two Marine Expeditionary Forces (MEF's). In addition, however, these two MEF's also have contingency missions and peacetime commitments in other theaters. For NATO, the Marine Corps plans no force changes but is continuing its modernization program.

In the development of the fiscal years 1990/91 President's Budget, resource emphasis was placed on protecting readiness—this to sustain the historical precedence of Naval Forces as the primary force of choice. To achieve this, however, end strength was reduced and sustainability growth was slowed. As a result of the President's Budget Agreement and the ongoing strategic review, I am in the process of reevaluating the impact of these priorities. Although this assessment is not complete, I believe that, at a minimum, the Marine Corps' *Force Structure* must be preserved and *Readiness*—the key to the Marine Corps' success—must be kept in balance with this structure. Providing the capability to win in combat whenever the Nation calls remains our central focus. That is what the Nation needs and expects. Everything else we do is secondary to this purpose.

Senator LEVIN. Gentlemen, a recent editorial in the New York Times criticized the administration's approach to reducing the defense budget. It stated, "Their approach . . . would . . . degrade military readiness and push up the cost of each weapon produced." Rather than eliminate or trim across the board some weapons systems, or stretch out others, the editors suggest the adoption of the John Lehman model which would place about one-third of the present active duty forces and their equipment into the Reserves. According to the editorial, this would "yield substantial savings . . . [and] leave in place active forces—fully equipped and trained and ready to be deployed and filled out with reserve units."

What is your reaction to this proposal and how much do you think we could save from enacting Lehman's suggestions?

We have heard many experts testify that if Gorbachev carries out his unilateral reduction the threat of short-warning conventional attack by the Warsaw Pact would be significantly reduced. Lehman states that the only loss of military capability from his plan would be the need for additional weeks or months to mobilize for all-out war. If the bolt-out-of-the-blue conventional attack becomes less likely why shouldn't we move ahead with the Lehman plan?

General VUONO. Transferring one-third of the current active force into the Reserves is unwarranted in light of the unstable international situation and the challenges to our security. Moreover, such a large transfer is neither possible in the near-term nor inexpensive. Today's Army is manned, trained, and equipped with the right balance of active, reserve, heavy, light, and special operations forces to provide the Nation a strategic force capable of credible deterrence and able to defend the national interests anywhere on the globe and at any level of conflict.

One-half of the Army is already in the Reserve components, including 42% of our combat units, 58% of our combat service units, and 70% of our combat service support units. Some type units exist almost exclusively in the Reserve components. This mix of forces best supports our current strategy at the current resource levels.

Mr. Lehman's proposal suggests a radical shift not justified by the strategic environment. While we envision that there will be some changes in the strategic environment, we do not foresee changes that justify a fundamental revision in AC/RC mix.

Our active and reserve force mix is the result of careful analysis of the following factors which influence the ability of AC or RC units to execute our national military strategy: readiness, mobilization/deployment, and type unit and mission posture. Other factors such as demographics and cost effectiveness are also considered. Finally, and most importantly, an assessment of strategic risk determines the numbers of AC and RC units and their missions.

Readiness. RC units generally cannot achieve unit level proficiency in as many separate and collective tasks as Active units because of training time constraints. This limits the types of missions we can assign to the RC.

Mobilization/deployment. RC units are not immediately available because of the time it takes to mobilize and deploy them. This could be a severe disadvantage in a crisis where units are needed immediately to fight alongside or to support AC units.

Type unit and mission posture. We consider if the unit will be forward deployed, in the contingency force, or a reinforcing unit. If the unit is a reinforcing unit, we examine when it is required in the theater. Forward deployed, contingency and early deploying units will most likely be AC because they do not have to be mobilized, and are generally in a higher state of readiness.

Demographics. The RC has already grown by 40% in the last ten years. We are not quite sure how much more they can continue to grow, but demographic trends indicate that there are finite limits to the extent to which we can recruit and retain RC units.

Cost effectiveness. On the average, RC units cost 65% as much as their AC counterparts. Thus the Lehman proposal could net some savings. The total amount saved would depend upon the number and type units shifted to the RC. But the important question here is not one of savings, but of cost effectiveness. Do the dollars generated by the shift to RC justify decreases in deterrence, readiness, availability, flexibility, and warfighting capability? Can we afford increased risk to our national security? Is buying more weapons worth the price we pay for reducing active force structure? What utility are more new weapons without a robust active component force of sufficient quantity and quality to provide a credible deterrence and capable of fully executing the strategy when reinforced by RC units in case of war? In the final analysis, these are the questions which must be answered. Answering them provides us an assessment of national strategic risk, which is determined by examining the threat and our ability to execute a strategy in response to that threat. Let us now examine the Lehman proposal in the context of strategic risk.

The most dangerous threat to our national security is, and for the foreseeable future will continue to be, the Soviet Union. Even if the Soviets fully execute their announced unilateral force reductions, NATO will remain well short of the forces required to defend itself with moderate risk. Putting more U.S. forces into the RC will exacerbate the force imbalance and increase risk because RC forces take longer to get into theater than AC forces. Additionally, the Soviets could return the forces they withdraw relatively quickly, particularly if not bound by an arms control agreement. We are hopeful that the Conventional Forces in Europe (CFE) negotiations will be successful. If so, there may be some changes in anticipated warning and reaction time that may allow us to adjust the mix of units in the AC and RC, but not to the extent proposed by Mr. Lehman. We continue to anticipate a need for forward deployed forces for deterrence, and a force capable of reinforcing NATO in minimal time (somewhat akin to our ten division M+10 force today). Without such a capability, we cannot execute U.S. and NATO strategy, particularly forward defense. Forward defense is increasingly important in this time of increasing global economic, political, and social interdependence. The fall of Europe could be devastating to the survival of the United States.

On the North American continent, we have stationed an Active component division in Alaska because of its close proximity to the U.S.S.R.

But the Soviet Union is not the only threat to the security of the United States. Mid- and low-intensity conflict in the Second and Third Worlds can threaten our interests, spread. We must maintain forward deployed forces in the Pacific for deterrence to promote regional stability in a theater that is both rising in importance to our Nation and experiencing significant turmoil. We now have two divisions in the vast Pacific area. We must also maintain a rapidly deployable global contingency force (five divisions at present) capable of protecting our interests in Southwest Asia, Latin America and elsewhere. These forces differ from our M+10 force because they are generally lighter and have a forced entry capability. Thus the M+10 force could not perform the contingency mission, nor could the contingency force alone perform the M+10 mission. However, should global war occur, the contingency forces could reinforce Europe. Likewise, the heavier M+10 forces could reinforce the contingency force in the Mideast or elsewhere.

Thus, the forward defense and deterrence aspects of our U.S. strategy currently require more forces than the 18 AC divisions, reinforced by ten RC divisions. Mr. Lehman's proposal would change the mix of AC/RC forces. However, to drastically change it now or in the near future would be premature, imprudent, and result in unwarranted risk to the Nation.

Our Army's deterrent posture relies on maintaining forces forward deployed and the capability to reinforce with additional combat and support forces within timeframes based on reasonable assumptions of warning times. Major force adjustments are not prudent until we have fully reviewed the Gorbachev reductions, achieved a meaningful arms control agreement with the Soviet Union, and fully assess all changes in the threat of conventional attack.

CONVENTIONAL ATTACK

General WELCH. The Air Force supports a total force concept. Approximately 25 percent of our general purpose forces are already in the Reserve and Air Guard, including 33 percent of our tactical fighters, 86 percent of our air defense interceptors, 40 percent of our reconnaissance aircraft, and 59 percent of our tactical airlift aircraft. However, before making any force structure decisions that will place more active units in the Reserves, it would be prudent to assess such a move's impact on a mission-by-mission, unit-by-unit basis, and cost balanced with capability. Shifting forces based on a potential change in warning time should be approached with caution.

Proposed changes in the Soviet Union and non-Soviet Warsaw Pact countries could offer us the opportunity to revise our containment strategy. However, we must guard against undue optimism and precipitous unilateral change which could result in no net improvement in the strategic equation. Reductions in Warsaw Pact forces have barely begun, and the modernization of Soviet forces continues.

If, however, cuts are fully implemented and NATO forces remain relatively intact, there may be a reduction in the threat of a Soviet/Pact conventional attack on NATO without weeks of prior mobilization and reinforcement may be reduced. However, the current Warsaw Pact conventional force advantage is still significant. Maintaining forward deployed forces, at least in the near term, is critical to reducing the likelihood of war and enhancing stability.

General **Gray**. I do not agree with Mr. Lehman's proposal. Similarly, his former senior, Caspar Weinberger, took issue with Mr. Lehman's proposal in a recent edition of Forbes. While he did not address Mr. Lehman's proposal specifically, Mr. James Webb also a former Secretary of the Navy, discussed the negative impact of a lesser reduction in the active naval forces in a recent article in the New York Times magazine. Mr. Lehman's proposal and the subsequent controversy that it causes makes for interesting reading. In essence, it sells books and newspapers. However, when considered by those who have the responsibility for providing forces to meet strategic requirements, Mr. Lehman's proposal is not practical. At present our active forces are stretched to the limit in their efforts to meet this Nation's commitments. The reduction of active forces means that you are giving up the capability to respond quickly to somewhere on the globe. The question which should be answered before such a cut is made, is where can you afford to lessen or eliminate a response. For the naval forces this question is key because any reduction in active duty naval forces means a detrimental effect on our ability to respond globally.

I would like to voice several concerns on the Lehman plan. In many cases, the U.S. currently maintains a third or more of its forces in the Reserve. I am thinking of U.S. Army round-out units and combat service support units. We only promote "creative bookkeeping" if we do not keep a careful eye on the starting point of Mr. Lehman's plan. My next concern centers on mobilization. The concept sounds simple and seductive; however, history tells us clearly that our record of identifying and dealing resolutely with strategic warning is poor. We must expect a worthy opponent to focus on this fundamental weakness in democratic governments. Additionally, I would emphasize two points. First, the resulting force structure would place an even higher premium on general purpose, strategically mobile and sustainable, conventional forces. In the main, it is naval forces which best display these qualities. Second, all forces—Reserve or Active—must continue to be equipped and trained to the very highest standard. In the zero-sum equation of combat capability, what is forfeited in numbers must be made up in quality in order to maintain the same degree of military sufficiency.

Admiral **Trost**. The Navy's Active/Reserve mix is continually reexamined during the Program Objective Memorandum (POM) development cycle as part of the Total Force Appraisal. This mix is reviewed based on exercise and operational experience to ensure it supports both our mobilization and peacetime contingency requirements. For instance, as a result of the Navy's recent mine warfare experience in the Persian Gulf, the Active/Reserve mix of the new mine countermeasures ships is being reviewed to ensure that we maintain an immediately available minesweeping capability.

The limited availability of Selected Reserve personnel is the biggest obstacle that must be overcome in using Naval Reserve assets to support contingencies short of mobilization. Congressional direction and fiscal constraints require that we place equipment and personnel assets in the Reserve component. However, in crisis situations, ready access to those assets is restricted.

The wisdom of placing more of the Navy's war-fighting capability in the Reserve hinges on improving the availability of those assets.

BURDENSHARING

Senator **Levin**. If the U.S. Congress recommended reductions in end strength of 20,000 in the Army, 10,000 in the Navy, 5,000 in the Marines, and 15,000 in the Air Force, where would you recommend that the cuts be taken?

General **Vuono**. The international security environment is in flux; specifically, improvements may very well flow from the Soviet unilateral decision, when implemented, to reduce forces in Eastern Europe. At this time however, the U.S. national security strategy demands more forces than we are able to provide. Cuts of this magnitude would have significant implications for our Nation and major force adjustments should be taken only after the administration has completed its national security reviews.

Regardless of where the Army would absorb the cut you suggest, it will mean substantially more risk to the Nation's global security, economic, political, and leadership interests.

Since the Fall of 1988, the Army has been conducting an exhaustive assessment of the Army's role in the current and future national security strategy. Our purpose was to evaluate the changing environment in which the Army raises, trains, and equips its forces to accomplish our strategic missions, while considering the threat, the strategy, and the availability of resources.

From the assessment we determined that we would recommend the Army should:

Protect the relative status of our forward deployed, deterrent forces through the mid-term (1995) to preclude an inadvertent alteration of our conventional arms control negotiating strategy outside of the NATO alliance process and agreed upon negotiation position. We also do not feel the security situation or the time is right to alter the status of our forward deployed deterrent forces in the volatile Far East.

Avoid cuts in our contingency and special operations forces to provide the Nation an immediately responsive and flexible force, rapidly deployable to counter aggression in the low- to mid-intensity spectrum of conflict. And,

Avoid piecemeal reductions in manning, readiness, or equipment levels in the units we have in the current structure.

If NATO achieves a prompt and meaningful conventional arms control agreement with the Warsaw Pact, then we would still have to assess very carefully the best way within treaty limits of revising our force structure. Rather than speculate, I would simply caution that our Army's deterrent posture derives from its strength and worldwide deployability (which depends on airlift and fast sealift). Under a CFE agreement any force structure reduction must consider how the alliance can best absorb and rationalize the residual force structure in the schematic context of Warsaw Pact reductions. In these positive but rapidly changing times, we must proceed with a prudent degree of caution.

I defer to my sister service counterparts on how they would absorb the cuts you propose.

END STRENGTH

General Welch. The Air Force considers manpower, like dollars, to be a resource supporting various Air Force programs and its associated force structure, and not a program in and of itself. Thus, just as when dollars are reduced, we would have to review which programs or force structure we would have to reduce or eliminate in order to accommodate a 15,000 end strength reduction. By this means, the Air Force avoids disconnecting a program and its associated force structure from the resources required to support the approved level of activity. Reductions of U.S. military abroad would require the Air Force to reduce its forward deployed force structure, thus overseas missions would have to be restructured or eliminated.

BURDENSHARING

Admiral Trost. A reduction of 10,000 to Navy end strength would be executed as a vertical cut to force structure with the associated end strength. When viewed with the already substantial ship reduction required by the revised fiscal year 1990/91 budget submit, this kind of reduction will further restrict our capability to meet our world-wide commitments, forward deployed strategy and the traditional missions that are unique to Naval Forces. Any force structure reductions must be made with commensurate reductions to maritime commitments to preclude further quality of life erosion for our sailors. Such quality of life issues as sea/shore rotation and OPTEMPO/PERSTEMPO would be adversely effected by a reduction in fleet size and no commensurate reduction to commitments. Reductions to force structure by "skimming" (reductions in end strength but not hardware) results in unacceptable compromises to readiness and quality of life issues.

General Gray. The Marine Corps recently reduced its active end strength by 3,000 Marines. In order to accept that reduction and at the same time implement the warfighting enhancements necessary to maintain combat capabilities in the Nation's principal expeditionary force, three infantry battalions were cadred, three artillery battalions were designated for conversion to reserve units, and significant personnel reductions were made in aviation, combat service support, and the supporting establishment.

If a further reduction of 5,000 were directed, we would attempt to shield the combat units of the Fleet Marine Force to the greatest practical extent in order to preserve global response capabilities. The targeted reduction would likely result in a further drawdown of about 2,300 in the non-FMF, creating a "barebones" supporting establishment. An additional 800 billets would be eliminated from our Service Headquarters, two Force Headquarters, and the major command elements in the Fleet Marine Force. In all probability we would also be required to accept cuts in combat units of about 1,200 Marines. Such reductions might consist of four tank companies and two VMFA fighter attack squadrons from the Fleet Marine Force.

The remaining amount needed to reach 5,000 would be made up from the patient, prisoner, transient, and training line.

5,000 Marines may appear to be a small number when compared with the DOD total force, but this is not a modest reduction for your Marine Corps. The cumulative reduction would be 8,000 Marines and it would cut into our fighting muscle. The supporting establishment which trains, supports, houses, and projects the Fleet Marine Force can only sustain reductions such as that discussed by reducing support to the tenant Marine Expeditionary Force units at the bases and stations as well as quality-of-life programs. Reductions in the Fleet Marine Force, the only alternative source for manpower, are reductions in the Nation's most effective global response capability. In short, while we have responded to the inquiry by frankly describing how such a reduction in your Corps might be accomplished, the fact remains that it would be a further reduction in the country's premier crisis response capability at a time when changes in the international picture seem to place a premium on ready forces prepared for employment across the spectrum of conflict.

Senator LEVIN. Gentlemen, if the U.S. Congress forced you to reduce U.S. military presence abroad, where do you recommend that the first reductions come from?

General VUONO. There would be serious military implications if we were to unilaterally reduce U.S. military presence abroad. Our strategy requires a forward deployed force structure of the proper quality, composition, and size to support our alliance commitments, deter adversaries, and if necessary, fight and win. Our forward deployed force levels are the minimum currently necessary to deter. Given the size and capability of our adversaries, we face significant risk if we have to fight. I do not believe it is militarily prudent to withdraw any forward deployed forces except in the context of negotiated reductions.

If forced to recommend a location for initial withdrawals, I would recommend we look first at our National Security Objectives and our military strategy. Only after we validate our U.S. objectives, our national priorities, and the forces we require based on the President's guidance and our defense plans, would I recommend a force level for any region.

General WELCH. As I have testified earlier, since fiscal year 1986 the Air Force has reduced its military end strength by over 37,000 spaces. This reduction was only accomplished by significantly restructuring and reducing our existing force structure. I cannot give you specific recommendations on where future cuts of the magnitude you suggest could be taken without first reviewing the impact of those cuts on the Air Force's ability to support the total defense posture.

Admiral TROST. Forward operations are a fundamental element of our national military strategy. These operations are cost effective, serve to deter conflict, allow us to fight our foes far from our shores, and clearly serve our Nation's interests. We would strongly recommend against reductions which may endanger our global national interests.

Should reductions be mandated we would recommend modification of our current Indian Ocean/Persian Gulf posture. Some modification would be acceptable given the current security environment in the region. If we did reduce our Indian Ocean posture and subsequently were required to respond to emerging crisis in the region, it would be necessary to respond with either our Carrier Battle Group from the Western Pacific or Mediterranean Sea. This, in turn, would require deployment of additional forces to support the vacated theater.

General GRAY. The question of choice reductions of U.S. military presence abroad is always painful because our strategy is based, in part, upon forward deployed forces. Our Nation's flexibility to respond to crises around the world is being adversely affected by an unfavorable long-term trend. Our declining access; including basing and overflight rights to areas threatened directly by Soviet and Soviet-client aggression and indirectly by nationalistic fervor, radical religious fundamentalism, narcotic trafficking and transnational terrorism; is a fact of life. Decreasing unity among our allies over the perceived threat will fragment our collective willingness to confront it and further embolden those who would actively contribute to this trend. Our shrinking forward-basing network will degrade our ability to stage forces and project conventional land and air combat power for crisis intervention actions. Our inability to maintain our current policy of forward deployment will force us to adopt a *de facto* policy of rapid reinforcement. Therefore, it is critical that we give preference to maintaining our Nation's most mobile and versatile general purpose forces. Such forces must be ready and available to respond to crises and handle contingency operations if we are to maintain credibility as a world power. Historically, our Nation's naval forces have remained forward deployed and have been the force of choice for most contingencies. As I have testified before, I believe, naval forces—sailors and marines—will continue to be the forces with the greatest aggregate utility for such assignments as we move into the 1990s. These forward deployed general purpose naval forces should be the last forces reduced from abroad. Accordingly, if the requirements persists, my recommendation would be to reduce first those land based conventional forces having the least utility across the spectrum of conflict. However, we must not undermine our strategy for the Conventional Forces in Europe (CFE) negotiations nor our ability to respond to crisis worldwide.

NET ASSESSMENT

Senator **Levin**. Gentlemen, do you believe that the trends in the overall East-West military balance favor the East? Where do you see the trends moving in the future as our relationship with the Soviet Union evolves? Do you believe we are stronger vis-a-vis the Soviet Union than we were in 1985? How much stronger will we be if the Soviets reduce their conventional forces 5–10 percent below current NATO levels?

General **Vuono**. The Soviet Union continues to maintain advantages in critical components of the overall military force balance, especially in regions of most importance to the United States. The Soviet military is far larger, is rapidly improving in quality, and in ability to project power. Still, notwithstanding the decline in real terms of budget levels since 1985, our actions since 1980 have reduced the Soviet advantages in other areas. Western technological advantages continue to provide significant offsets to Soviet numbers.

However, I would have to say that I do not believe the long term trends favor the East if we continue to maintain our policy of peace through strength. Political and economic strength must ultimately underpin military strength. Current trends in these areas clearly favor the West. Given the Soviet political and economic weaknesses, I do not think they will overcome the Western advantages.

If the Soviets actually reduce their conventional forces 5–10 percent below current NATO levels, and NATO reduces to an equal level while maintaining adequate defensive capability, the warfighting risk will be reduced to some degree. I cannot say how much without analyzing both Soviet and NATO levels.

General **Welch**. Western investments of the early 80s have resulted in fielding improved weapon systems which have decreased the East's advantage. Still, the most disturbing trend facing the West is the improved quality of Eastern bloc weapon systems. In the past, we have held an advantage in technology application and quality of weapon systems. Today, the East maintains a sizable numerical advantage in conventional forces and is now fielding high tech and improved quality weapon systems. This numerical superiority, combined with technological modernization and improved quality makes them all the more potent as an adversary.

I believe it is still too early to predict the evolution of these trends due to the dynamic nature of the world today. There is a great deal of discussion about the Soviet Union's economy and direction in military doctrine, but I would not describe this rhetoric as establishing a trend. The fact remains that the West is still greatly outnumbered today by Eastern bloc forces. Furthermore, Soviet production as well as research and development have not diminished.

Regarding your question of whether we are stronger today than we were in 1985 vis-a-vis the Soviets, I believe we are. Western modernization efforts of the 80s have made significant advances in countering the numerical superiority and technological modernization of the Eastern bloc. However, with the long lead times required for research and development as well as acquisition, it will be some time before we can determine the full effect of the reduced military budgets we have seen over the last 4 years.

Real reductions by the Warsaw Pact, in particular the Soviet Union, to NATO levels would be welcomed and assessed as increasing stability and decreasing risk. However, even with such reductions the security interests of the alliance should remain based on a prudent military strategy and the deterrent value of its ready, modern, and technologically superior force.

Admiral **Trost**. The Soviet Navy's warfighting potential will increase markedly in the 1990s due to the arrival of new, high-technology platforms, despite a drop in total numbers of combatants. Although the Soviets characterize announced retirement of numerous surface and subsurface platforms as "naval force reductions," in fact they constitute the removal of obsolescent, inefficient platforms which are being replaced by units such as the AKULA SSN, TBILISI CVG, KIROV CGN. To further improve their position vis-a-vis Western navies, the Soviets will use the accelerated retirement of Khrushchev-era combatants combined with formal naval arms control initiatives to apply pressure on the West for naval force reductions.

Soviet naval arms control proposals are directed toward neutralizing areas of Western advantage, such as sea-based airpower, cruise missiles and ASW. Their proposals aim at denying the West naval access to regions accessible to Soviet ground forces or to the naval forces of their client regional powers as well as slowing the West's momentum in key naval technologies. In contrast to the West, the Soviets need only to achieve their war aims in the continental theaters of military action contiguous to their borders; they do not need to support warfighting in distant areas. Should the West accept Soviet naval arms control proposals in even modified form, the Soviets would succeed in reducing the West's ability to hold vital Soviet interests at risk from the sea, resulting in a need for fewer platforms to defend against the threat. Having achieved a more favorable correlation of forces for defense of the continental flanks at potentially lower costs, the Soviets can reallocate resources to other areas such as naval research and development, or offensive missions against the vital sea lines of communication between North America and Europe.

General **Gray**. In a word, yes; my reasons are several. The Communist world is still doctrinally dedicated to the notion of communism as a historical imperative and ultimate victor in the struggle with capitalism. This doctrine rationalizes Eastern expansionism, adventurism, and aggression on a global scale. The closed nature of the Communist political process also serves this end well. In general, the Western desire for a just peace colors its perceptions and interpretations of the East's actions. We can see this trend today. Consequently, in my view, until the peoples of Communist ruled countries attain a democratic form of government, the military initiative will continue to rest with the East.

If on the other hand, we are witnessing the failure of communism as an ideology, I would also counsel a dim view of the situation. Such circumstances could well result in international acts of desperation and/or grave internal turmoil; both conditions would foster instability and uncertainty. In an age of nuclear weaponry, these are conditions to be avoided.

In my view, we have no choice but to maintain a credible deterrent. The East must not doubt our commitment to containment. Should internal troubles boil over, they must be motivated to limit the destructive effects of their decline to their own territory.

I believe that through difficult and demanding conditions, all the services work hard to maintain the military sufficiency commensurate with the protection of U.S. interests. Because our Nation has no intention of projecting its influence through the use of force, the notion of strength beyond the sufficiency needed to deter is not relevant.

Several factors mitigate any Soviet reduction in conventional forces. Universal conscription with mandatory service in the reserve establishment until age 50 still provide the Soviet Union with a well-trained force of some 10 to 15 million soldiers. The USSR's strategic location on the Eurasian landmass, internal lines of communication, and nationalized military-industrial complex, all equate to a considerable military advantage when the political leadership desires to wield its power. Indeed, the displacement of manpower resources from military formations to the industrial pursuits of the state, best serves the immediate political and economic needs of the Communist Party.

AIRCRAFT INCLUSION IN CFE NEGOTIATIONS

Senator **Levin**. General Welch, the Soviets have been pushing to include strike aircraft and combat helicopter in the CFE negotiations. While the Pact proposal focuses on fighter-bomber and attack aircraft (in which NATO has the numerical advantage), if fighter-interceptor aircraft are included in the tally, then the Pact has the advantage. If NATO could negotiate away this asymmetry, would it be in our interest? At what point in the negotiations should we begin to negotiate on aircraft? Should these reductions come before or after the reduction of other weapons or reduction in personnel?

General **Welch**. Senator, since you submitted this question, the President and our NATO allies, with the full support of the Joint Chiefs of Staff, have proposed significant new initiatives that include aircraft and helicopters in the CFE negotiations. JCS representatives have testified before this committee on the details and intent of these proposals. The Air Force is working closely with the JCS and other government agencies to present a comprehensive NATO package for the third round of CFE talks in September.

NATO FORCE-TO-SPACE RATIO

Senator LEVIN. General Vuono, in an environment where short-warning conventional attack by the Warsaw Pact was not a serious threat, would NATO need the force-to-space ratio that is currently being argued (1 division per 20–25km)?

General VUONO. The level of NATO forward deployed forces is based on several considerations. The first is the alliance commitment to a forward-defense along the entire Inter-German border (IGB). This commitment is in accordance with the approved NATO strategy (MC14/3) that provides for deterrence and defense. Paramount to that strategy are the concepts of forward defense and flexible response. NATO's ability to sustain forward defense is dependent in large measure on occupying the 900km IGB in strength, with sufficient forces in reserve, to preclude any rapid Warsaw Pact penetration into the depth of West Germany. The force-to-space requirement is, in this sense, more sensitive to the 900km frontage that must be defended and, by comparison, less sensitive to the size of the attacking Warsaw Pact force than many imagine.

A modest decrease in the force-to-space ratio may be acceptable in the context of a significantly reduced Warsaw Pact capability to conduct an unreinforced surprise attack. However, a significant "stretching-out" of NATO's forces could raise the risk that the Warsaw Pact would concentrate its forces to create a local force-on-force ratio highly unfavorable to NATO in a short-warning or unreinforced attack scenario. Beyond the threat of a surprise Warsaw Pact attack, NATO's active duty force level also serves to partially compensate for the Warsaw Pact's vastly shorter interior lines of reinforcement, and the relative speed with which the Pact is currently capable of augmenting its already quantitatively superior forces.

Absent sufficient forces to establish an initial defense along the IGB, NATO would be required to adopt a strategy based on a mobile, in depth defense. This strategy would require NATO to trade West German territory for time in order for NATO to mobilize and concentrate for a coherent defense, at a much greater risk to both the requirement to sustain that defense and restore the IGB. At a minimum it would require NATO forces to ultimately assume the offensive in expelling Warsaw Pact forces from allied territory to preserve the integrity of the NATO area. Thus, although a mobile defense strategy is militarily feasible, it would fundamentally violate the alliance commitment to the West Germans and is a higher risk strategy.

Some reductions in NATO active-duty divisions would be militarily acceptable provided the Warsaw Pact threat is substantially reduced to the levels being considered in the Negotiation on Conventional Forces in Europe (CFE). Provided NATO maintained its ability to rapidly mobilize and reinforce its forces, NATO's CFE proposal, which the Soviet Union has generally accepted, might permit some post-CFE reductions in active duty force levels. General Galvin and I agree that this could be done without an increase in risk once the Warsaw Pact had reduced to NATO's levels, without percipitating a wholesale revision of NATO's forward defense strategy. Such reductions would be contingent on approval of CFE-associated stabilizing measures that dramatically increase the transparency of NATO-Warsaw Pact military activities and constrain the possibility for surreptitious Warsaw Pact mobilization.

STRATEGIC DEFENSE INITIATIVE (SDI)

Senator LEVIN. General Welch, six former Defense secretaries (Harold Brown, Clark Clifford, Melvin Laird, Robert McNamara, Elliot Richardson, and James Schlesinger) recently stated that the ABM Treaty "makes an important contribution to American Security and to reducing the risk of war." The Scowcroft Commission cited the ABM Treaty as "one of the most successful arms control agreements" and pointed out "the criticality of the ABM Treaty to further arms control agreements."

Admiral Crowe, when testifying before the House on the fiscal year 1990 budget stated that "SDI is a long ways from being a fact" and that we must then continue to maintain a healthy offensive deterrent. I would certainly agree with him on both points.

What military capability or role would you require for an SDI system that would justify the abrogation of the ABM Treaty?

In a tight budget, SDI will be the fastest growing program ($33 billion/5 years) largely at the expense of conventional capabilities. Is this an emphasis you share?

Secretary Cheney, during the same House hearing, stated that "if we reach the point where I think we have the capability to deploy SDI—and I fully expect to do that someday—and that deployment were inconsistent with the ABM Treaty, then I would advocate the abrogation of the treaty and that we should move forward and deploy those defenses." This sounds like a commitment to deploy SDI and abrogate the ABM Treaty as soon as we have the capability.

Will you define for us the capability that would be needed for an SDI system that would justify its deployment and the abrogation of the ABM Treaty? Would it provide a population defense, silo defense or some other capability? Also would such a system be effective against countermeasures such as fast burn boosters, decoys, ASATS and depressed trajectory missiles (SLBMs), bombers or cruise missiles?

General WELCH. The ABM Treaty documented the two superpowers' recognition of our mutual inability, at that time, to defend against ballistic missiles. It was signed at a time when we were threatened by missiles possessed only by the other and when ABM technology available was clearly inadequate to the task. Even then it was explicitly agreed that each side would be allowed to pursue more advanced technology and limited testing with mechanisms specified allowing either party to withdraw from the treaty if national interests so dictate. The ABM Treaty did not in any way postulate that defenses against ballistic missiles were forever inconceivable.

In the last 10 years, the availability of technology to produce weapons-grade nuclear material and boosters capable of carrying nuclear warheads over long distances has proliferated. While continuing our efforts to minimize proliferation, we must recognize that ballistic missile technologies are no longer just limited to superpowers. At the same time, significant advances in technology now make it possible to conceive of credible ballistic missile defense.

We do not subscribe to, nor expect to attain, a perfect defensive system. A reasonable level of effectiveness is all that is needed to allow us to enhance deterrence by greatly complicating the Soviet planner's job and increasing his uncertainty. The same SDI capability that helps us achieve this important objective is also available to counter new missile threats posed by Third World countries as well as to accidental, irrational, or limited missile attacks. I agree with Admiral Crowe that "SDI is a long ways from being a fact," and that prudent investment in SDI technologies is a wise complement to our offensive deterrent capability. The Soviets also appear to believe as we do. Mr. Gorbachev recently stated they are pursuing advanced ABM technologies in a program as vigorous as our SDI, while simultaneously rapidly modernizing their ICBMs.

I support the SDI program at the revised, and substantially reduced, level of $33 billion over the next 5 years. This level of funding allows us to proceed with a healthy technology development program to address the critical issues which must be satisfied before any decision to develop missile defenses could be made. Even in a time of tight budgets and reduced spending on both strategic and conventional forces, a prudent investment level in defense technologies is warranted.

Secretary Cheney's remarks concerning possible abrogation of the ABM Treaty state a fact: if this Nation makes a decision to deploy a ballistic missile defense, other than the one site now allowed, we will have to abrogate the ABM Treaty. The treaty provides provisions for doing just that . . . either party may withdraw after 6 months notification of intent to do so. Such a decision could only be made after an extensive national strategic review of all the available options, including limited protection of population centers, ICBM silos, or other valued resources, such as forces which could respond to unexpected Soviet actions.

Given the uncertainty over the best course of action to take, retaining a prudent SDI program while continuing to adhere to the ABM Treaty remains in our best interests at this time.

MOBILE ICBM REQUIREMENTS

Senator LEVIN. Have we had a strategic requirement to field both the rail mobile MX and the road mobile Midgetman? Won't one of these systems provide a sufficient level of survivability and stability?

General WELCH. We have a strategic requirement to redress a shortfall in prompt, hard target kill capability and to enhance the long term survivability of our ICBM force. Rebasing the first 50 Peacekeeper missiles alone does not provide a sufficient number of modernized, high quality ICBM warheads. Rebasing Peacekeeper and deploying Small ICBM brings us closer to the Air Force goal of 1500 modernized ICBM warheads and places them all in more survivable basing modes. Additionally, deterrence is best served when we maximize enemy uncertainty about their ability to carry out a successful attack and their certainty of effective U.S. retaliation. From this standpoint, a combination of rail and road mobile systems is preferable to an either/or option because it poses a greater attack planning challenge.

SILO MIDGETMAN

Senator LEVIN. Is the Air Force analyzing the possibility of deploying a silo-based Midgetman?

General WELCH. No. Although that option has been considered in the past, the Air Force is not currently analyzing the possibilities of deploying a silo-based Midgetman. In April 1983, one of the key recommendations of the Scowcroft Commission was to initiate a program to resolve the uncertainties regarding silo and shelter hardness. As a result, the Air Force and DNA conducted a joint hardening technology program so that a Small ICBM program FSD decision could be made. Following a technical review of missile and basing options by the Joint Requirements Management Board, President Reagan directed in December 1986 that the Small ICBM be placed in a hard mobile launcher. The system will be deployed at existing Minuteman launch facilities beginning at Malmstrom, AFB, MT.

MOBILE ICBM PRIORITY

Senator LEVIN. Can you tell us how high a priority having a mobile land-based ICBM is? Is it more important than strengthening conventional forces? More important than producing the B-2 bomber, or upgrading the B-1B avionics?

General WELCH. A mobile land-based ICBM and the other systems you mention are all essential to the long-term security of this country. The President's revised budget accurately reflects our careful and thorough deliberations in establishing priorities. The additional capability provided by a mobile ICBM adds significantly to triad deterrence and crisis stability. Moreover, it removes the Soviet unilateral advantage, particularly in terms of arms control leverage.

QUESTIONS SUBMITTED BY SENATOR JOHN GLENN

TOTAL FORCE

Senator GLENN. For all of you to answer, in 1973 this Nation initiated the Total Force Policy whereby the active duty forces and the Reserve and National Guard Forces, as well as the supporting civilian establishments within the Department of Defense, all were integrated into one force to meet the national security needs of this country. One of the major effects of this policy was a substantial change in combat support and combat service support functions.

Over the ensuing 15 plus years, there have been major changes in the national security needs of this country. Yet to my best knowledge, we have never consciously and carefully reviewed our total force policy, this in spite of the fact that certain elements of our Reserve forces have disastrously low readiness and questionable combat capability.

I feel that a full fledged re-assessment of our total force policy is long overdue, and should be initiated immediately. What are your feelings on this matter?

General WELCH. As far as the Air Force is concerned, the Total Force Policy has been under periodic review since its inception, and has been an absolute success story, with mission capability and readiness at an all-time high. The Air Reserve components must meet high readiness standards and currently have greater than 95 percent of their flying units rated combat capable today.

General VUONO. I believe the Total Force Policy does receive conscious, careful, and continuous review, both at OSD and within the Army. Since the Total Force derives from requirements generated during the strategy development and review process, we continuously assess the adequacy and efficiency of the Total Force. As the Secretary of Defense stated in his recent report to Congress, OSD has drafted a Total Force Policy to more clearly articulate the principles, policies, and evaluation criteria governing the Total Force. The Army participated in the drafting of, and fully supports, this policy.

I must disagree with you on one point, and that is the capability of our Reserve Forces. The Army National Guard and U.S. Army Reserve are vital in executing the Army's strategic roles. They are fully integrated with the active forces in U.S. defense plans. In recognition of their roles the Army has special management, training, and modernization programs underway to develop and maintain Reserve component readiness at a level consistent with their wartime missions. For example, full time support is a force multiplier that enables commanders to concentrate on mobilization training. To achieve the required readiness, Reserve component units are aligned with active units. The Army is also giving high priority to individual qualification and leader development programs. The Army accords the same priority for equipment modernization to Reserve component units as it does to their Active component unit counterparts with which they fight or whom they support, dedicates procurement funds to the Reserve components, and intensively manages equipment programs. As a result, Reserve component unit readiness has improved significantly over the past 3 years.

Admiral **Trost**. The Navy institutionalized the Total Force Policy process in 1984 with the establishment of the Total Force Branch as a permanent part of my staff. Navy's Total Force Advocate, a flag officer, directs the efforts of this branch which develops and monitors Total Force Policy and systematically reviews existing and planned programs to ensure that Navy is building the best mix of Active and Reserve Forces to meet its warfighting needs. These tasks are accomplished with close coordination between the Total Force Advocate and the Director, Naval Reserve.

In addition to handling routine Total Force Policy and force mix issues, the Branch also prepares a Total Force Appraisal as part of the Program Objective Memorandum (POM) process. The appraisal provides a detailed assessment of major Total Force Policy and programming issues and is briefed to the two-star Program Development Review Committee (PDRC) and the three-star Program Review Committee.

The Total Force Branch also drafts the Navy's annual Report to Congress on the Total Force. This report outlines Navy's plans, programs and policy for the full integration of the Active and Reserve components. Six reports have been provided to Congress thus far.

Given Navy's on-going efforts in the Total Force arena and the giant strides we have made in integrating the Active and Reserve components since the beginning of this decade, I am satisfied that Navy has a sound process for developing, implementing, and monitoring Total Force Policy and for determining the optimum Total Force mix to meet our peacetime and mobilization requirements. I do not feel that a full-fledged reassessment of our Total Force Policy is required.

General **Gray**. The warfighting readiness and versatility of the Marine Corps continues to be a top priority and requires a conscious thought process to ensure the most effective and efficient use of all Marine Corps resources.

Total Force Policy has evolved over the years and will continually be refined with the Marine Corps. The Marine Corps views its Reserve as a full partner which provides a vital dimension in adding depth to our forces in the event the need arises. Last year we reevaluated our capabilities and our ability to respond across the spectrum of conflict. Our thought process was guided by certain realities such as; peacetime commitments, the budget, the probability of occurrence of certain levels of conflict, CINC OPLANS, time factors pertaining to reserve movement times (closure) and the legislation governing reserve availability. The result was the Warfighting Enhancement Initiatives which streamlined the active force and improved our capability and flexibility to provide a rapid response to the most likely conflict, i.e., LIC/MIC. In the event that the least likely conflict occurs, i.e. HIC, our Marine Expeditionary Forces will be augmented and reinforced by our Reserve Forces.

Since readiness is the foundation and key to success, our pursuit and maintenance of quality personnel, equipment and training is critical. Recruiting and retaining quality personnel whether it be for the active, reserve or civilian work force remains high on our list of priorities. Considering fiscal realities, we have endeavored to modernize our Reserve Forces at the same pace as our Active Forces. Our experience has shown that training on like equipment not only enhances readiness but facilitates rapid assimilation of forces. In regards to training, the key is to continue to strive for the optimum degree of integration of Active and Reserve Forces. For example, during fiscal year 1989 23,000 reservists participated in major exercises in the Continental United States, as well as, Germany, Norway, Egypt, Korea, Philippines, and Thailand.

We will continue to assess our policy and pursue initiatives to progressively improve Total Force readiness throughout the Marine Corps.

PERSONNEL PROGRAMS

Senator **Glenn**. Secretary Cheney testified yesterday that the men and women in our Armed Forces are our most important asset. I believe it would be beneficial for the committee to hear from each of you on the following: What are your priority personnel programs and are they adequately funded in the budget?

General **Vuono**. Clearly, my highest priority within the personnel arena is to maintain the quality of the Total Army, Active, Reserve, Guard, and civilian employees.

However, this quality is very perishable. To maintain our successes and to correct shortcomings we need careful planning and stable funding for the future. Today, we have been given a significant challenge—to maintain a force consisting of quality soldiers, with quality leaders, and quality equipment. This can only be done by providing the necessary programs and incentives to attract and then retain quality soldiers.

The amended budget submitted to you has been developed to ensure that the Army can continue to accomplish its mission. This budget request focuses on providing the trained and ready force needed to implement our national security strategy around the world. It provides needed resources for adequate quality of life and family programs for them. It seeks additional funds to return to an acceptable level the resources and incentives needed to attract and retain these soldiers.

Recruiting Resources and Incentives. Today we are seeing disturbing trends in our ability to continue to recruit quality soldiers. We are currently facing the most difficult recruiting environment since 1978–1979. Our ability to recruit quality soldiers is becoming more difficult each year. The population of 17–21 year olds is significantly down, a trend that will continue until the mid-1990's. Concurrently, youth unemployment is at its lowest level in 15 years. The youth wage index has risen for the first time in years.

Our ability to recruit quality high school graduates and seniors has declined for 28 straight months. We need help.

We ask for the restoration of recruiting resources. In the amended budget we have regulated increases in advertising dollars, the size of the Army college fund kickers, and the size of enlistment bonuses. The bottom line is that we need the resources and incentives to help us continue to recruit quality soldiers.

Army National Guard and Reserve recruiting missions are also at risk. They too need continued funding for incentive programs and AGR recruiters. Because of the increased competition from the civilian sector, sustainment incentives are critical. With a larger portion of the Army's combat service and combat service support mission being absorbed by the Reserves, it becomes critical that we ensure that they too access and retain quality soldiers.

In addition to the critically important recruiting programs, there are other areas where help is needed to maintain the momentum that the total Army quality demands:

NCO Readiness: Shortage in Military Personnel Appropriation (MPA) since fiscal year 1988 forced us to reduce our NCO inventory which will result in an anticipated shortage of about 9,000 NCOs in fiscal year 1990. This undermanning impacts on small unit training, readiness, and retention. A clearly defined, sound, consistent promotion program is an essential element of any effort to encourage retention. Our Army today is the best ever. We should not allow it to erode because we fail to care for our very backbone—the NCO Corps.

Officer Management: We will reduce our officer force by over 800 officers in fiscal year 1990 to meet directed reductions. This is the fourth consecutive year in which we have made officer cuts. The bulk of these cuts were in the company grade ranks. We have used the Selective Early Retirement authority provided by DOPMA, but it does not allow us to take sufficient numbers from those year groups in which we have excess officers. In the event of future reductions we must be able to better align the force and achieve a more equitable distribution of reductions. We have asked for a moderate expansion of the Selective Early Retirement Provision of DOPMA to permit better year group management where needed. Concurrently, we are also asking support for a limited and selective waiver to allow some volunteer retirements in certain skills in which we have a surplus of officers in the senior grades.

Reserve Component Management: Full-time support for Reserve troop units is the most important personnel issue facing the Army's Reserve components, the AGR Program being the cornerstone of full-time support. Under the Total Force Policy, our national security interests are increasingly dependent upon our ability to mobilize, deploy, and employ Army Guard and Army Reserve forces rapidly as a ready, viable part of the Total Army. Responsibility for unit and individual readiness has increased dramatically, as our strategy places great emphasis on the Reserve components. The AGR program is a "force multiplier", enabling drilling reservists to take maximum advantage of limited training time by using full-time personnel to organize, administer, recruit, and train the Reserve component. With a fiscal year requirement for 70,724 AGR positions, the budget request for 39,844 authorizations results in a shortfall of about 30,800 AGRs.

Similarly, we need legislation that would provide authority similar to that provided by DOPMA to the active force by which to manage the Reserve officer force. The

Reserve Officer Personnel Management Act would provide those management tools. It more closely aligns Reserve and Active officer personnel management, creating a "Total Army" officer management process. It contributes to readiness for mobilization and unifies personnel management for Reserve officers of all services. It provides for selective continuation and selective early retirement, flexible zones for promotion consideration, and provides flexibility for changing officer requirements. It provides a balance between management objectives and equitable treatment of individual career expectations.

Warrant Officer Management: Another area that requires revitalization is management of warrant officers. We must ensure that we are properly accessing, training, and promoting our warrants against future needs. We have found that after 20 years of service, over half of our warrants move on to the private sector. Most are being drawn by lucrative jobs. We must stem this exodus. We will be proposing legislation to align the warrant officer and officer management systems. This legislation would include incentives which we feel will encourage more warrant officers to stay beyond 20 years of service.

Quality of Life-Family Programs: The Army's quality of life program is another essential element that has a direct impact on the quality of the Army and its ability to accomplish the mission. Today's Army is a married Army. Over 74 percent of the officers and 53 percent of the enlisted force is married. We have over 43,000 single parents and 37,000 dual military families. There are over 397,000 spouses and 600,000 children. This is a major change from the Army of the 50's which was only 29 percent married. With this change come significant challenges for the Army and the commanders in the field.

In today's Army the decision to remain is a family decision, made on the basis of the level of satisfaction with the military felt by all of the family members. Our surveys have shown the decisive impact families' well-being has on soldiers' ability to perform and on their decision to make the Army a career. Therefore, it is important that we provide soldiers and their families those services which they would otherwise expect to receive if they were members of the civilian community.

If we are to retain those quality soldiers, it is important that we help them to care for the well-being of their families regardless of where they are stationed in the world. Family separations in the Army are extensive. As an example, 80 percent of our enlisted force experience some type of family separation each year. Studies have shown that family separations impact on retention and, therefore, on readiness. It is vitally important that we help ease the difficulties of Army life by providing adequate quality of life, family, and morale, welfare, and recreation programs.

Quality of life programs provide a high return on our investment in our trained soldiers. These programs were reduced significantly in fiscal year 1988 and fiscal year 1989, along with other Army programs. The fiscal year 1990 budget for community and family program support is 19 percent lower than fiscal year 1988 expenditures. The construction program has been reduced 36 percent in barracks replacement and renovation and the projected elimination of the backlog for child development centers has been extended from fiscal year 1992 to fiscal year 1994. Medical care has seen some reductions and deferrals as well. PRIMUS clinics have been held to less than half of what was originally planned and programs for early detection of breast cancer in female soldiers and family members have been significantly reduced. We have made every attempt to protect qualify of life programs from the worst of the budget reductions. We must, however, put our limited resources on those programs which hold the strongest connection to readiness and retention. Any further reductions in the Army budget increases the risk of jeopardizing the acceptability of service life with readiness and retention paying the price.

Civilian Personnel Programs: There is another critical part of the Army team that is essential to the ability of the Army to accomplish its mission. Without our dedicated and professional civilian work force, the military could not devote its time to preparing its forces to meet its role as a strategic deterrent. The civilian work force is an equal partner in this effort and as such their needs must also be addressed. The Federal Civilian Personnel Management System, which we must use to recruit and retain these critical skills, is cumbersome and does not support a quality work force.

In looking at studies of the U.S. labor force from now to the year 2000, it is clear that job skill levels will increase, and competition to hire will intensify greatly as the available supply of qualified personnel declines. This will make it even more difficult for us to compete in the marketplace. We need a modernization of the Civilian Personnel Management System. We must strengthen the leadership, deregulate and "power down" authority, and modernize supporting systems. We must provide increased and productive civilian leadership training, simplification of our non-appropriated fund management system to accommodate a more business oriented approach, and the ability to manage to budget. Last year OPM initiated legislation which would provide these features. Unfortunately it did not pass both Houses of Congress.

We will also be seeking your support for the Army Civilian Training, Education, and Development System (ACTEDS) which is designed to help us better educate and develop our work force. We support legislative authority requested by OPM to fund training for civilians that will help them achieve a degree. Currently, we may train them but the degree must be incidental to that training.

It is also important that we recognize the families of our civilian employees. This is especially true for those civilian families who move overseas, are required to have Army-wide mobility, or must move to satisfy statutory rights. They are subjected to the same hardships in obtaining employment as our military families. Many civilian spouses forfeit career employment opportunities to be supportive of their spouses who are required to move.

Let me again seek your support to permanently eliminate statutory civilian end strength ceilings.

Military and Civilian Compensation: It is also important that our soldiers have adequate compensation. Increases in military pay since 1982 have lagged behind pay raises in the private sector. Currently that lag is about 10.1 percent. It is important not to allow that gap to increase to the point that it causes a decline in the quality of our force. Current recruiting difficulties indicate that the threshold may have already been crossed. I urge your support for a pay raise that keeps military pay competitive with the private sector. Federal civilian pay is now 22 percent lower than the private sector.

Another compensation issue is the cap on the Variable Housing Allowance (VHA). The VHA cap precludes the program from performing in the manner Congress designed. The VHA goal is for the service member to have out-of-pocket costs equal to 15 percent of the national median housing costs for their pay grade. In actuality, they are now absorbing 21.5 percent of those costs. The cap restricts management alternatives since this is an entitlement and must be paid. I urge you to restore this program to its congressionally intended levels and eliminate the VHA cap.

Over the past few years the Army has experienced substantial unprogrammed expenditures in the MPA account because of foreign currency fluctuations. This caused us to redirect dollars from critical programs. We need to incorporate MPA into the foreign currency fluctuation account to preclude this from occurring each year. This fluctuation makes management of our programs very difficult. This would eliminate the need to annually reprogram to adjust for these fluctuations.

Summary: Let me reinforce some critical points. First, the Army's primary focus is on recruiting and retaining a quality force both military and civilian. Today our ability to recruit has become fragile as a result of cuts in recruiting resources and programs we are able to offer. We must reinstitute these programs. We need this quality in order to support readiness and the warfighting capability of the Army as a strategic deterrent force. What we are seeking from you, the Congress, are resources and incentives to continue quality recruiting, to keep soldiers and families together overseas, to provide quality soldier and family programs.

The Army, its soldiers and families, is your national asset. You must support it and invest in its future. It provides a societal benefit not only in defense of our country but also as a source for improving the lives of those who join it, serve it, and then return to share that experience and the skills they have acquired with the rest of society. Help us to continue to meet that challenge.

PERSONNEL PROGRAMS

General WELCH. A first priority is to provide an adequate compensation package for Air Force people. The 1 January 1989 military pay raise was the first real closure in the pay comparability gap since 1981. It was a step in the right direction. This 4.3 average percent pay raise resulted in military pay lagging the private sector pay by 10.1 percent. A 3.6 percent pay raise in fiscal year 1990 will allow the pay gap to grow to 10.8 percent. Though elimination of the pay gap may be unachievable in the present fiscal environment, the purchasing power of military pay must not be allowed to erode any further.

Providing the necessary monetary incentives to improve aviator retention is also a high priority. Pilot retention is a critical problem now, and retention continues to decline. Despite implementation of the Aviator Continuation Pay bonus on 1 January of this year, we still cannot retain the necessary number of pilots we need. We expect to be over 500 pilots short by the end of fiscal year 1989. I believe a major step in reversing the declining pilot retention trend is embodied in the provisions of the Aviation Career Improvement Act of 1989. Enactment of this legislation is essential to countering the long-term pilot retention problem.

Improved management of the overseas station allowance program is a third priority. The volatility of the U.S. dollar against foreign currencies has substantially increased funding requirements for overseas station allowances. In the past, these increases have been funded through reprogramming from other Air Force sources and nonprogrammatic force structure reductions to ensure our members stationed overseas have the same purchasing power as their counterparts in the CONUS. We believe participation in the Foreign Currency Fluctuation Account would insulate this program from the volatility of the foreign currency market and eliminate the need to take nonprogrammatic actions.

We need more attention to providing adequate housing allowances for our people. The fiscal year 1989 Variable Housing Allowance (VHA) funding ceiling was a major contributor to the reduction in VHA rates for approximately 69 percent of Air Force VHA recipients. This marked the second consecutive year VHA rates were lowered to remain within the VHA funding ceiling. Members now absorb 21.5 percent of their housing expenses vice the 15 percent initially intended by Congress, and continuation of the VHA funding limitation seen in recent years will prevent further reduction of members' out-of-pocket expenses. The VHA system must be allowed to operate without the spending caps or other artificial constraints that have contributed to its instability.

We understand the Federal budget situation and the challenges it poses. However, successive years of funding constraints have caused us to drawdown our resources in education and training, social actions, PCS management, and reenlistment bonus programs. Other priorities include obtaining increased funding for PCS reimbursements and removal of the appropriated fund ceiling for morale, welfare, and recreation activities. It is becoming more difficult to send a clear signal to our people that we can, in fact, take care of our own. If fully appropriated, the President's Budget would only allow us to continue these programs at their current levels. Improvement can only be realized through increased funding or reprogramming.

The Air Force recruiting program overall is healthy. Current enlisted recruiting is strong with over 99 percent high school graduates, Mental Categories I & II over 50 percent, and Category IV accessions, the lowest allowed, less than 0.1 percent. These statistics virtually mirror our fiscal year 1988 results. However, I must include a note of caution. Air Force recruiting is experiencing some regional difficulty in achieving enlisted recruiting goals, specifically in the Northeast and on the West Coast. A portion of this difficulty can be attributed to improved economic conditions. Typically, the Air Force recruits 55,000 to 65,000 new recruits per year. Due to congressionally mandated budget limitations and end-strength reductions, Air Force accessions are currently in the mid-40,000 range. We also gauge our future recruiting outlook by observing our sister services, who are currently having difficulty achieving their objectives and are experiencing reductions in quality. Our overall officer program remains strong with the low accession levels. The medical program goals will be difficult to achieve with anticipated shortfalls in certain specialized physician and nurse categories.

Overall Air Force personnel retention is good. However, poor pilot retention remains a serious problem. Enlisted retention has been excellent for the last 6 years and that trend continues. Through the second quarter of fiscal year 1989 (31 Mar 89), the reenlistment rates for first-term, second-term, and career (more than two enlistments) are 70.9 percent, 87.2 percent, and 98.2 percent, respectively. Except for the pilot force, officer retention is relatively stable. The pilot 6- to 11-year group cumulative continuation rate (CCR) is critically low at 40 percent, 23 percent below the level required to sustain our force. Navigator, nonrated operations, and overall mission support CCRs remain healthy. Within the mission support category, retention of technically trained officers such as engineers and computer programmers could become another area of concern as companies recruit our highly trained personnel. We continue to monitor all personnel retention trends throughout the USAF.

MANPOWER

Admiral TROST. Our highest priority is to maintain a stable environment for our people, to avoid the uncertainties and turmoil we saw in fiscal year 1988 and to restore confidence in our commitment to take care of our people. The priority personnel programs in the Navy are those which enhance the quality of life of our service members. By emphasizing the quality of Navy life and taking care of our people, we enhance our overall fleet readiness. Today, with the size of the fleet being reduced, the Navy cannot afford even the slightest decline in unit readiness. The key to the success of maintaining these requisite levels of preparedness is the retention of trained sailors. We feel that by providing our personnel quality medical care, the means to obtain suitable housing, and adequate monetary incentives such as closing the gap between our pay levels and those of our civilian counterparts, the Selective Reenlistment Bonus (SRB), Aviation Career Incentive Pay (ACIP) and the Medical Officer Retention Bonus (MORB), we can obtain the necessary stability in our force levels to ensure continued readiness. Adequate manning levels of operating forces is a key not only to personnel readiness of the fleet, but also to the quality of life of our sailors. Our fiscal year 1990 end strength is in balance with the force levels—ships and squadrons—we intend to man sufficiently to maintain three section watches, provide time for training and provide for leave and liberty in port.

The manpower personnel budget request is sized to correctly match the end strength request which, in turn, is correctly sized to match the force structure.

Status of Recruiting Programs and Recruit Quality

The Navy is consistently achieving its quantity and quality goals, having met these goals every month in fiscal year 1988 and each month so far in fiscal year 1989. At the end of April, we had accessed 61 percent upper mental groups and 87 percent high school diploma graduates. We fully expect to achieve our fiscal year goals of 57.5 percent upper mental groups and 90 percent high school diploma graduates. However, we are making these goals at the expense of drawing down the size of our previously healthy Delayed Entry Program (DEP) manpower pool. In addition to the shrinking youth population, Navy recruiting faces a low unemployment rate and—more important—a greatly reduced propensity to enlist in the Navy. This lower propensity to enlist—resulting from a lack of national advertising—is revealed in both Department of Defense and Navy advertising surveys.

While we are continuing to make monthly accession goals, Navy recruiting has missed its new contract objectives 12 of the past 15 months. The result is we are steadily shrinking our DEP size—a factor that will eventually cause us to miss monthly goals if not checked. This forces us more than ever into what is referred to as "work force recruiting." In general terms this form of recruiting means more of our monthly recruits must ship the same month they enlist—rather than entering the DEP for some later month. A concern in this area is not only the size of our DEP, but the quality of life for our recruiters as they work harder to make assigned goals.

The increasing difficulty of finding sufficient numbers of the more capable upper mental group category from which we draw people for our nuclear and advanced technical skills is of concern. On the officer side we face strong challenges in minority recruiting in addition to attracting sufficient numbers of qualified applicants to our nuclear power and medical programs.

To accomplish recruiting objectives, the Navy is taking a three-pronged approach to recruiting in the 1990's. We have established a combined CNO-level recruiting and retention policy organization for providing strategic oversight and long-range planning. We intend to tackle the Navy's public image problem through a long-range advertising and public relations strategy that will not only improve, but maintain the 17-21 year old's propensity to enlist. And finally, we intend to improve our first-term attrition and retention as a direct means of lowering the actual numbers of people we must recruit.

The Navy is presently completing a series of major studies on recruiting and attrition. The initial results say our strategy is right.

Status of Personnel Retention

The Navy experienced a modest decline in retention in fiscal year 1988 due to several unpopular personnel actions, including delayed transfers and promotions, early reenlistments and separations, and suspension of the Selective Reenlistment Bonus (SRB) program.

These actions, the result of an unplanned shortfall in the MPN account, caused widespread concern among enlisted personnel about erosion of benefits. Consequently, many who were forced to make early decisions opted to separate. Fiscal year 1988 gross retention rates were: 1st term—35.3 percent, 2nd term—51.8 percent, 3rd term and over—67.5 percent.

In fiscal year 1989, adequate funding of the MPN account has allowed us to again provide stability in personnel matters. The SRB program is funded again, PCS moves are taking place as programmed, and promotions are not delayed. As a result, retention has increased in fiscal year 1989 to date, to 36.6 percent for first term, and 54.7 percent for second term.

Retention for third term and over personnel remains slightly down for fiscal year 1989 to date, at 65.3 percent. This decline is due to an increase in retirements for High Year Tenure and the attainment of retirement eligibility by large numbers of Vietnam-era personnel. This is a natural progression in an all-volunteer force, and not a major concern.

Maintaining high retention rates in a fiscally constrained environment will require innovative retention initiatives. Efforts are underway to promote no-cost retention incentives, emphasize in-rate advancement and command-level recognition, and reduce first term attrition.

PRIORITY MANPOWER PROGRAMS

General **Gray**. There are four areas of particular importance in the Marine Corps' fiscal year 1990/91 personnel budget. These areas are average strength, PCS, SRB and aviator retention incentives. The first of these involves the levels of funding for officer and enlisted average strength, which are contained in our budget request. I believe this funding is adequate but not optimal to support our manpower and readiness objectives. We have scaled back our fiscal year 1990 and fiscal year 1991 manpower programs to conserve average strength and as a result, personnel readiness will suffer.

A second priority is our PCS program, which has been drawn down to maintenance levels in fiscal year 1990 and fiscal year 1991. A viable PCS program is crucial to ensure we are able to properly balance skills and grades throughout the force. Reduced funding for PCS will require us to initiate harmful actions affecting both individual marines and the Marine Corps.

A third manpower priority is our SRB program. At present, we have 152 specialties which are critically short. I believe the fiscal year 1990/91 SRB program is short of the mark in terms of funding for new bonus awards for these critical skill areas. The number of new awards requested in the fiscal year 1990 and fiscal year 1991 is more than 22 percent lower than past levels. I am concerned that this is too low. A more realistic level would be 6,500 new bonus awards. However, we are unable, because of budget constraints, to fund fully the SRB program to this level.

Adequate aviator retention incentives is a fourth manpower priority. I support key provisions of the proposed Aviation Career Improvement Act of 1989, particularly increased ACIP and extension of the ACP Bonus. The proposed aviator retention incentives are currently unfunded requirements.

RECRUITING

The Marine Corps, through the efforts of a dedicated recruiting force, has attained great success in recruiting the high quality men and women we need to man our force (table 1). This success, however, will be increasingly more difficult to maintain in the future. The recruiting service, like all areas, is facing potential budget reductions over the next few years. This is especially ominous when you consider these reductions mirror a large decline in the available youth population. Increased competition for this shrinking pool of available youth will require a commitment to recruiting as well as adequate resources to ensure our objectives can be met.

TABLE 1

	Total force [1] accession goal	Total force attained	Percent high school graduate	Percent I–IIIA
Fiscal year:				
1986	43,365	45,179	97.7	68.4
1987	42,466	43,142	98.2	68.7
1988	43,878	44,235	95.7	69.4
1989 (YTD) [2]	21,062	21,000	95.4	67.5

[1] Total force figures include all regular accessions male and female as well as all non prior service reserve accessions male and female.

[2] Fiscal year 1989 figures through 30 April (total fiscal year 1989 requirement 40,160 as contained in the amended President's Budget).

PERSONNEL RETENTION

Our personnel retention rates for fiscal year 1989 remain at approximately the fiscal year 1988 levels. First termers are being retained at about 24 percent, a rate which does not yield what we need in absolute numbers. Intermediates and careerists are being retained at greater than required rates.

EARLY RETIREMENT OF "CORAL SEA"

Senator GLENN. As you know, I have been a strong supporter of a forward deployed strategy and what I consider to be the cornerstone of that strategy—the forward deployment of carrier battle groups and marine amphibious ready groups. I am concerned, therefore, that the administration is proposing to retire the U.S.S. *Coral Sea* early and remain at 14 deployable carriers vice 15.

Admiral, as I recall, during the world-wide wargame in Pensacola last summer, we didn't have enough aircraft carriers to meet our wartime requirements. If we retire *Coral Sea* early, can we continue to meet our forward deployed peacetime commitments, and of equal importance, can we maintain the 18 month cycle between extended deployments for Navy and Marine personnel which I consider to be sacrosanct?

Admiral TROST. Today's force level of fourteen deployable carriers is not sufficient to execute simultaneous combat operations in all regions. Instead, we plan to execute sequential operations between theaters. The decision to retire U.S.S. *Coral Sea* early can be accommodated under our strategy without sacrificing our commitment to defend our national interests through forward operations.

Personnel Tempo (PERSTEMPO) guidelines call for deployment lengths of no more than six months and at least a 2:1 Turn Around Ratio (TAR) between deployments. These minimum guidelines are essential to ensure we retain quality personnel, and provide time for needed maintenance and training. In practical terms, our carrier force now experiences 12-14 months between extended deployments. Retirement of U.S.S. *Coral Sea* will reduce our operating flexibility from that which we had originally planned for. However, in view of the reduction of tensions in the Indian Ocean region, we will likely be able to adjust our current overseas posture and thus maintain our personnel tempo guidelines.

B-1 ELECTRONIC WARFARE DEFICIENCIES

Senator GLENN. General Welch, recent press reports indicate that little progress has been made in correcting the B-1's electronic warfare deficiencies. Can you update the committee on the latest plan to correct these deficiencies? Also, can you tell us the latest status of the B-1 conventional capabilities integration?

General WELCH. During the summer and early fall of 1988, the Air Force conducted an extensive evaluation of options to address performance shortfalls in the B-1B's ECM system—the ALQ-161A. Although last spring's flight tests confirmed that the most significant ECM techniques work, the tests also revealed a design deficiency in the system's receiver/processor that precludes achieving the system's full performance specification without further modifications. A significant shortfall is the system's ability to provide [deleted]. The Air Force extensively reviewed all available options to remedy this situation, including proposals by the contractor as well as off-the-shelf hardware available from other sources. The following plan is a prudent risk approach to achieving our objectives.

First, establish the ALQ-161A "core" program with EATON Corporation. [Deleted.] In summary, the "core" ALQ-161A will provide consistent, supportable ECM performance against the top B-1B lethal threats. Total costs of the "core" effort with associated support are $725 million.

The second element of the plan addresses the [deleted] by installing a stand-alone radar warning receiver (RWR) to augment the "core" ALQ-161 program described above. The fiscal year 1990 budget submission requests a total of $116 million in fiscal year 1990/91 for the initial integration of the Air Force common RWR (ALR-56M) onto the B-1B. The total B-1B RWR program estimate is $489 million.

A parallel development effort for integrating a common Air Force RWR into the B-1B with the EATON "core" ALQ-161A program is the most prudent, best risk approach to providing the B-1B with needed operational capabilities. The combination of the "core" ALQ-161A program and the RWR also establishes the foundation for future growth of the B-1B's defensive avionics.

Regarding B-1B conventional capabilities, flight testing is now complete and we have demonstrated the capability of delivering 84 MK-82 500 pound bombs carried internally in the B-1B's three bomb bays. This capability was demonstrated at

300 ft release altitude traveling at .8 mach resulting in all weapons separating within 2 seconds and covering an impact area of less than 1,700 ft.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

FORCE AND READINESS RISK LEVELS

Senator MCCAIN. For all of you, please provide a comprehensive list of the risks imposed by the force and readiness levels funded in the current FYDP. I would like you to divide this assessment as applicable to your service to discuss the risks affecting our strategic forces, our theater nuclear forces, our forces for the Central Region of NATO, for the flanks of NATO, for the Atlantic, for Northeast Asia, for the Pacific, for the defense of the gulf, for other LIC and power projection missions, and in terms of strategic mobility.

General VUONO. The Army provides the land forces required by our national military strategy. But the Army does not fight alone. It fights alongside and in coordination with our sister services and our allies. The best assessment of risk, therefore, is one that assesses the capability of the Army in the joint and alliance context. Such an assessment is provided in the Joint Military Net Assessment (JMNA), which I paraphrase in part below:

Overall, in a global conventional war, U.S. forces are capable of protecting the U.S. homeland and its interests except in central Europe, where there would be an insufficient number of U.S. and allied ground forces. The alliance cannot mount a well-founded, enduring conventional defense against a determined Soviet campaign. NATO would face the prospect of losing considerable territory or resorting to nuclear weapons. The amended FYDP reduces Army forces by one Active component reinforcing brigade for the NATO central region. This clearly increases the risk articulated in the JMNA, since the amendment to the FYDP occurred after the JMNA.

In the Persian Gulf, the Soviets could seize their initial objectives prior to the arrival of initial U.S. reinforcing forces. Shortfalls in strategic airlift and sealift continues to degrade our capability to respond to regional and global crisis.

In Northeast Asia, U.S. forces will be able to continue to deter war and promote regional stability. Should deterrence fail, U.S. and Republic of Korea forces will be able to stop a North Korean attack. However, further reductions in funding or force levels could adversely affect our deterrence credibility and lessen our influence in the Pacific, a region of increasing importance.

Concerning low intensity conflict, our capabilities will improve significantly during the FYDP period as programmed initiatives erase many of the current deficiencies in our special operations and other lighter forces.

Lastly, in the area of theater nuclear forces, the net assessment shows an improvement for the United States and NATO versus the Soviet Union and the Warsaw Pact if programmed modernization takes place. The JMNA points out that this area must receive a high priority for modernization over the FYDP period. Failure to modernize could result in high risk to our deterrence and warfighting capability.

General WELCH. A comprehensive assessment of risks by theater and mission area can best be provided by the Chairman's net assessment, and by the testimony of the concerned unified and specified commanders. I can, however, discuss the priorities we have addressed as we crafted this budget to meet the highest-priority needs of the combatant commanders.

In strategic forces, this budget provides the basis for a consensus on moving forward with one of the most significant remaining tasks of the strategic modernization program: improving the survivability of the land-based missile leg of the triad. Rebasing the Peacekeeper into rail garrison provides for near-term, relatively low-cost addition to our deterrent capability and to the contribution to crisis stability of our strategic forces. The budget, as you are aware, further provides for the continued development of the Small ICBM for fielding in the late 1990s. That solution provides the complementary capabilities of these two systems, while phasing their deployment to ensure the affordability of this approach.

The goal for the bomber force continues to be roughly 340 modernized nuclear-capable heavy bombers available for multiple missions and a much smaller force of older B-52Gs retained for conventional operations. The budget provides for the upgrades to the B-1B necessary for its continued capability in the face of an evolving threat, and for the orderly—though slowed—development and procurement of the

B-2 that will provide the long-term capability to efficiently cover a wide spectrum of targets to include the hardest targets and heavily defended targets.

In theater forces, this budget maintains our progress toward filling the long-standing shortfalls in strategic lift through the procurement of the C-17; it further supports efforts to strip the night sanctuary away from opposing forces through deployment of the LANTIRN, and provides a welcome step toward upgrading the close air support capabilities now provided by the A-10. The AIM-120 continues to mature, and will over this time frame enter the inventory in significant numbers, multiplying the effectiveness of our current air-to-air fighters, the F-15 and the F-16. Finally, the budget supports continued—though slowed—development of the next generation of Air Force tactical aircraft, the ATF and the USAF variant of the ATA.

Theater nuclear forces will improve over the FYDP with the deployment of the F-15E and continued upgrades to the F-111 and the F-16. These programs were planned and funded before the signing of the INF Treaty. Elimination of the Pershing II and the GLCM simply increases their importance.

The Air Force approach to providing necessary low-intensity conflict capabilities to the combatant commanders remains a combination of special operations forces, and conventional forces that can be tailored for any contingency from counter-terrorism to a major regional situation. USAF programs have focused on rapid response airlift for forces of all services. These programs initiated over the past decade are now reaching fruition—modified C-141s with especially trained aircrews, MC-130s, MH-53 Pave Low helicopters for example. However, as you are aware, budget cuts have forced cancellation of the CV-22. Hence, we will have to continue to rely on improved MD-130s and helicopter lift for the long-range infiltration and exfiltration missions.

Careful prioritization has enabled the Air Force to continue to balance its highest-priority needs, to maintain a ready force while providing for future capabilities. However, the cost of unstable defense budgets is clear in the budget before you. The B-2 has been slowed. The F-15E buy has been curtailed at 200 aircraft, well short of our requirements for this dual-capable aircraft; the F-16 buy has been reduced from 180 to 150 aircraft per year. Cancellation of the CV-22 limits long-range SOF capability and decreases the operational flexibility of special operations forces. The decline in Air Force structure continues; through fiscal year 1990 the Air Force will have cut 32 squadrons and over 40,000 people from its force structure in fiscal year 1985. Clearly this combination of slowed modernization and shrinking force structure poses risks to the Air Force ability to conduct its missions.

We have carefully examined Air Force priorities and placed emphasis on the programs essential to deterrence across a range of responsibilities and commitments. This budget request, crafted in coordination with the theater commanders and their supporting component commanders, will provide the unified and specified commanders with the best air support attainable within the resources available.

Admiral Trost. The Soviet Union is assessed as being capable of unilaterally and simultaneously initiating war operations in multiple theaters. This capability, not merely expected Soviet intent, determines U.S. force requirements.

With respect to our maritime strategic forces, the current funding levels pose no risk to the maintenance of our relatively invulnerable SSBN force. Theater nuclear forces are likewise unaffected, so long as SLCMs continue to be procured in the quantities required. Maritime forces that support NATO's central region through power projection and reinforcement remain heavily tasked to prevail in the Atlantic lifelines and Norwegian Sea maritime campaigns laid down in the Concept of Maritime Operations. Reductions in battle groups and surface combatants would further strain NATO's maritime capability in these areas. Similarly, in non-NATO maritime theaters such as the Pacific, the ability to deter through presence, to protect the interests of our friends and trading partners, and to promote stability in the area is a direct function of the numbers and types of naval forces available. Our global Navy is operating at a high tempo of operations worldwide, executing the aforementioned tasks laid down by higher authority. Reductions in readiness and structure can only increase the risk that some commitments will not be met, or met adequately enough to do the job.

The global conventional warfighting requirement for aircraft carrier battle groups, for example, as validated by the Joint Chiefs of Staff, is more than 20. This is the minimum force assessed as necessary to conduct simultaneous combat operations against the Soviet Union with a reasonable assurance of success. The gap between this wartime requirement and actual carrier levels will require that we conduct operations sequentially between theaters.

In time of war, conducting sequential operations with a reduced force will require making difficult judgments. For example, we might not be able to exploit the opportunity to execute simultaneous offensive operations with our carrier forces in the defense of Norway or Turkey. As SECDEF Cheney has indicated, with 14 carrier battlegroups, our forward deployed commitments will have to be modified. This will adversely affect the ability to protect our interests in those areas where our forward presence is reduced.

General Gray. The Marine Corps does not budget for sustainment based on specific theater or CINC OPLANs. In accordance with current defense guidance budgeting is based on support for our three active MEFs and the Reserve component. Levels of attainment for Marine Forces vary for each class of supply. Generally, levels are sufficient to support a low intensity conflict for 60 days. As requirements are analyzed for the most logistically demanding OPLANs, the risks imposed by shortages become more significant. There are exceptions to levels of attainment for certain types of supplies such as construction supplies, packaged petroleum products and other supplies which are readily available from commercial sources. Potential loss of shipping from the U.S. Flag and effective U.S. controlled dry cargo fleets during the 1994-2000 timeframe will substantially decrease capability and adversely impact overall combat readiness. Unless USMC forces (MAGTFs, MPFs, and air landed MEBs) deploy early in the development state of a contingency the competition for strategic sealift and airlift assets may prevent the flanks from receiving the tactical attention necessary for timely and successful deployment because priority for strategic mobility will be directed to the major conflict.

MV-22

Senator McCain. General Gray, isn't it true that if it were not for the extremely risky double sling option, the MV-22 would be far cheaper than the OSD cost estimates for a combination of the CH-53E and CH/HH-60?

General Gray. If the double sling option is discarded and all relevant costs were addressed, then the MV-22 is cheaper in terms of constant 1988 dollars.

CH-53E

Senator McCain. Is it credible that the double sling version of the CH-53/CH-HH-60 option is more than $10 billion cheaper than the single sling option?

General Gray. The driving factor behind the costs of the double sling concept vice the single sling is the number of aircraft and associated operating and support (O&S) costs. The double sling option reduces costs in two ways as follows:

1. Reduces CH-53E requirements from 376 to 225. This reduces procurement costs by $2.8 billion and long term O&S costs by $5.0 billion for a savings of $7.8 billion.
2. By arbitrarily placing 5 extra troops (in addition to HMMWV crews) in the CH-53E's, the requirement for CH-60's is reduced from 590 to 478. This reduces procurement costs by $1.4 billion and O&S costs by $1.5 billion for a savings of $2.9 billion.

The double sling option reduces the total cost by $10.7 billion; however, it is an unproven concept with no tactical applicability in the assault mission.

Senator McCain. Does it make any sense to try to save $2-5 billion over the entire life cycle cost of the system—when the total procurement cost is a minimum of $23 to $25 billion—and give up so much in terms of mission performance?

General Gray. Under the current austere budget environment, the Secretary of Defense was faced with an affordability dilemma, and many difficult decisions in order to meet the required budget control figures. With the information that was available to him, he elected to terminate the V-22 program and I support that decision. However, I continue to strongly believe that the V-22 has great potential and offers the Nation a quantum leap forward in operational capability. As I have already testified, our cost analysis shows the MV-22 to be the least costly over the entire life cycle of the system.

BLACKHAWK/53E MIX

Senator McCain. What manpower requirements will change if we adopt the Blackhawk/53E mix proposal?

General Gray. The equivalent lift mix of CH-53E/H-60 dramatically increases manpower requirement. The increased number of CH-53E's and H-60's would result in an increased requirement of 522 officers and 5,151 enlisted personnel.

IMPACT OF V-22 CANCELLATION

Senator McCain. Provide a detailed analysis for the record of the impact on the Corps' plan and concept of operations of cancelling the V-22, and the impact of accepting the alternative—a mix of CH-53E and UH-60 Blackhawks, to replace the aging CH-46 helicopter inventory.

General GRAY. The Marine Corps is an expeditionary force with a global mission. To meet these commitments, the Corps must be prepared to fight across the spectrum of possible conflicts in both amphibious operations and subsequent operations ashore. Acquisition of the V-22 was crucial to conducting both the type and tempo of operations demanded by the current threat.

The Marine Corps has adopted the doctrine of maneuver warfare. Maneuver warfare is characterized by rapid, flexible, and bold maneuver. By moving large forces well into the enemies lightly defended vital areas, the Marine Corps seeks to avoid frontal assault, attrition style warfare. The V-22 is the only troop assault aircraft which has the range and endurance to maneuver decisively in both dimensions of space and time. By maneuvering in these two dimensions, a numerically inferior force can achieve decisive superiority at the time and place of its choosing. The alternative force CH-53E/UH60 mix does not permit this kind of opportunistic maneuver. The alternative force limits the Marine Corps to more predictable methods of attack.

During amphibious operations current plans call for the Marine Corps to be able to land the assault elements of a Marine Expeditionary Force (MEF) and Marine Expeditionary Brigade (MEB) in 90 minutes from 50 nm at sea. The V-22, by virtue of its speed, capacity, endurance, and survivability, is the only medium assault aircraft which—in conjunction with heavy lift CH-53E's and landing craft air cushioned (LCAC) vehicles—can accomplish this task. Cancellation of the V-22 program will force the Amphibious Task Force close to shore, exposing naval ships and personnel to the increasingly lethal threat posed by anti-ship missiles and sea mines.

Additionally, V-22 speed and endurance features would have permitted a V-22 borne force to avoid a direct attack on enemy beach emplacements. A V-22 force would have the "legs" to fly to the enemies' vulnerable flanks and rear. Acquisition of an alternative mix of aircraft will limit operational flexibility and force the Corps into landings more reminiscent of the frontal assaults of WWII.

Additionally—and perhaps the greatest benefit of the V-22—is its designed survivability, enabling more marines to get to the fight instead of becoming casualties. The V-22 is the safest means of maneuvering troops on the modern battlefield. Studies indicate that the V-22 is three times more survivable against a missile threat and 13 times more survivable against a gun threat than an alternative CH-53E/UH-60 mix. Analyses have shown that, during six months of sustained combat, marines could expect to lose twice as many aircraft using the H-60 rather than the V-22. Its designed-in crashworthiness allows V-22 passengers and crew to survive in the event of a catastrophic hit. These characteristics would be important in reducing peacetime casualties as well. Although difficult to quantify in terms of cost savings, survivability is probably the greatest single advantage of the V-22 over the alternative mix.

The proposed alternative force mix also limits our strategic deployability. The V-22's 2100nm unrefueled range would allow the Corps to self-deploy all V-22's associated with the Maritime Prepositioned Force (MPF) MEB or the Norway airlanded MEB. This capability would significantly reduce closure times and facilitate the rapid introduction of Marine forces ashore, while conserving scarce strategic airlift for other priority missions. With a CH-53E/UH-60 force, the Marine Corps would be forced into using strategic airlift—subject to their availability during a major conflict.

We must keep in mind that the V-22 is not just a replacement aircraft for our aging fleet of helicopters. It represents a quantum leap forward in technology that will revolutionize the way we wage war. The alternative mix of CH-53E's and UH-60's essentially means a continuation of the status quo that, at best, offers only a slight evolutionary move forward. These alternatives, regardless of how attractive, are still helicopters and will remain constrained aerodynamically. The V-22 offers this Nation the opportunity to dramatically shape the next battlefield. We should look beyond replacement costs and recognize the V-22 as a significant capability enhancement investment. Quite frankly, without the V-22 the Corps will still fulfill all its taskings and missions; but we will be forced to do them slower, with less flexibility, and with more casualties.

NATO AND WARSAW PACT BALANCE

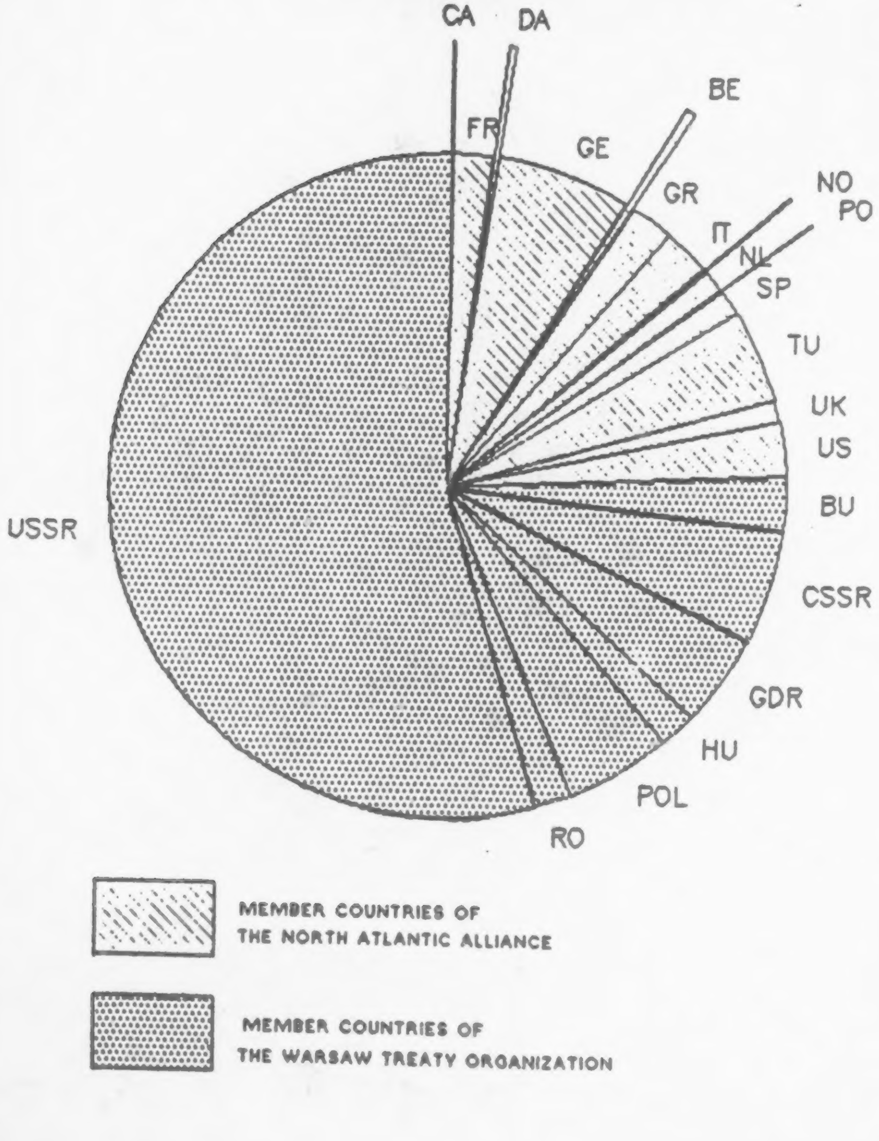
Senator MCCAIN. General Vuono, you refer on page 2 of your written statement to the Warsaw Pact's superiority in land forces in Europe. Could you provide an unclassified comparison of the size of NATO and Warsaw Pact military manpower combat units, and major equipment types?

General VUONO. Any comparison of alliance and Warsaw Pact forces must be based on those items of equipment and manpower which directly affect combat capability. It is most meaningful if the comparison examines those equipment and manpower categories that are stationed in Europe in the zone that is the focus of our Conventional Forces in Europe (CFE) negotiations, Atlantic to the Urals. The following charts reflect those comparisons and were prepared by NATO's High Level Task Force (HLTF) in 1989 for release in unclassified fora:

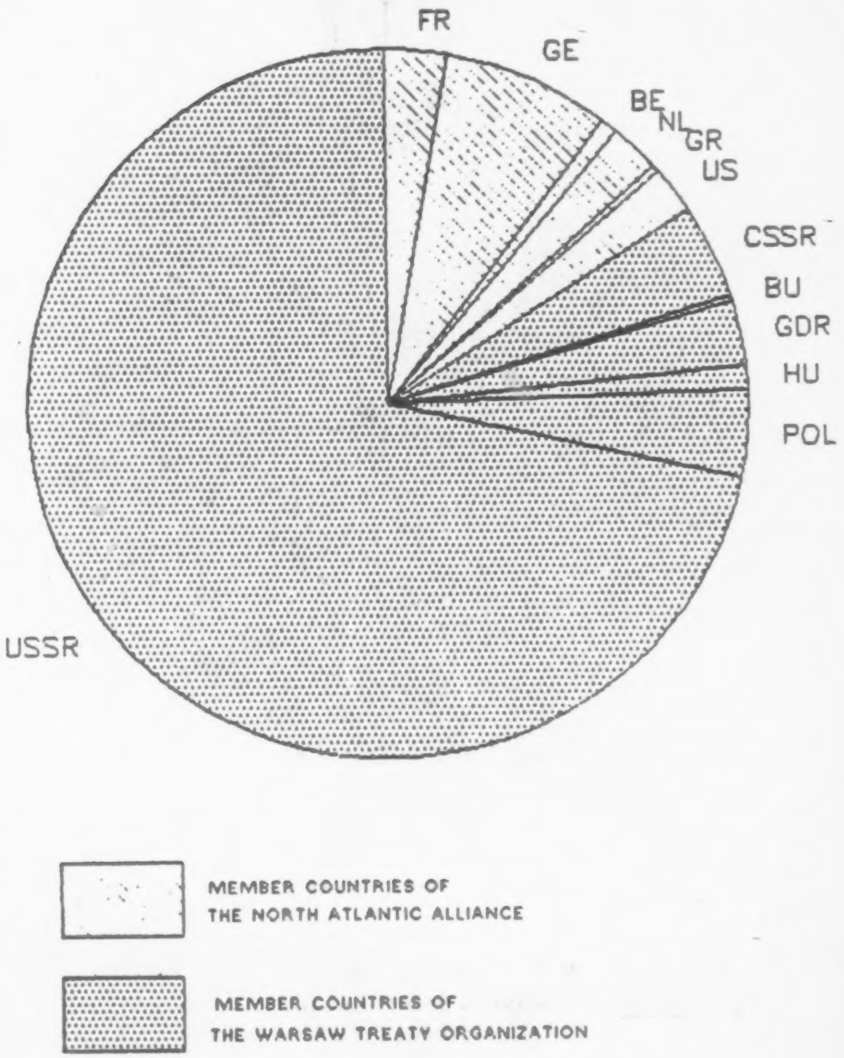
GROUND FORCES

The following tables and charts provide information as of January 1988 on different equipment categories and on manpower of ground forces belonging to the member countries of the North Atlantic alliance and of the Warsaw Treaty Organization that are stationed in Europe from the Atlantic to the Urals, i.e. in the areas to be covered in the future negotiations. Each category contains relevant explanatory information.

MAIN BATTLE TANKS
(IN UNITS)

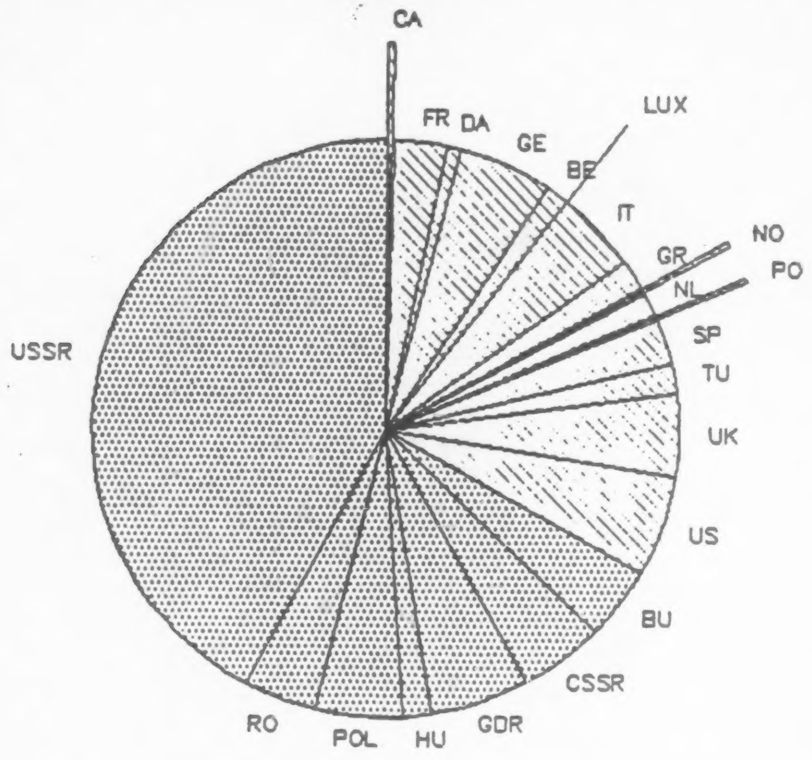


ARMOURED INFANTRY FIGHTING VEHICLES
(IN UNITS)



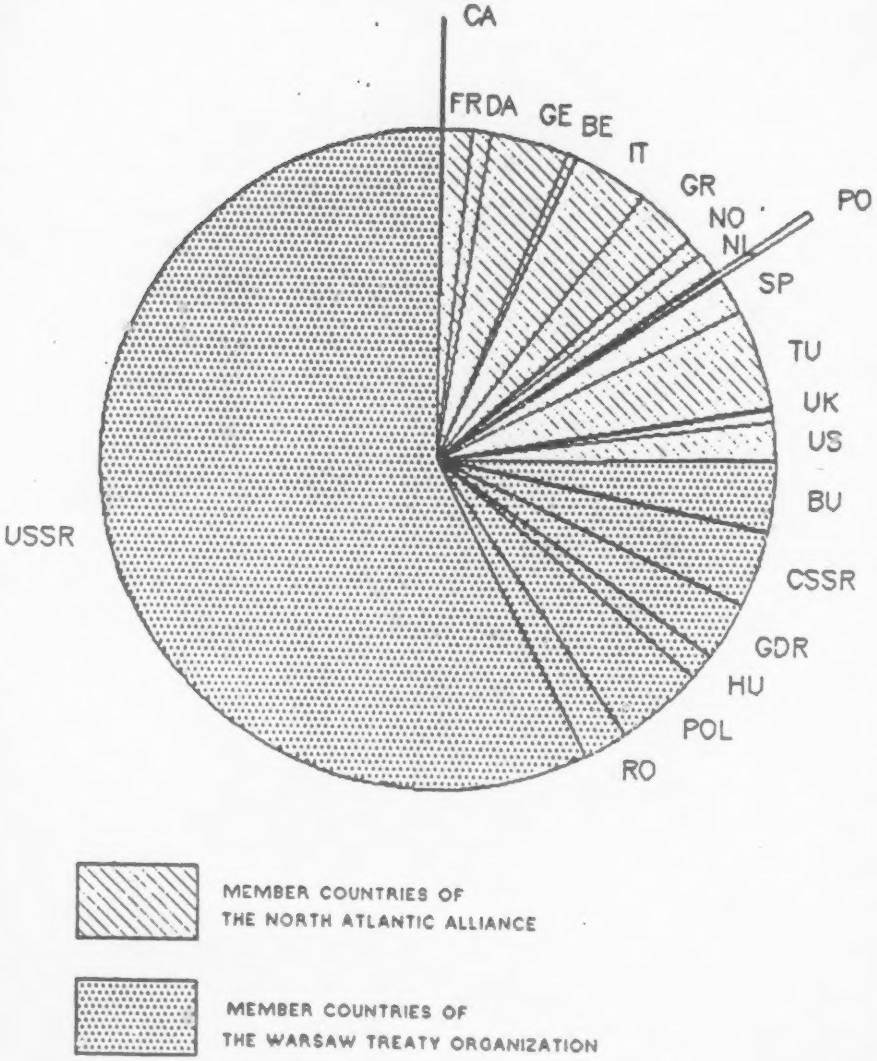
OTHER ARMOURED VEHICLES

(IN UNITS)



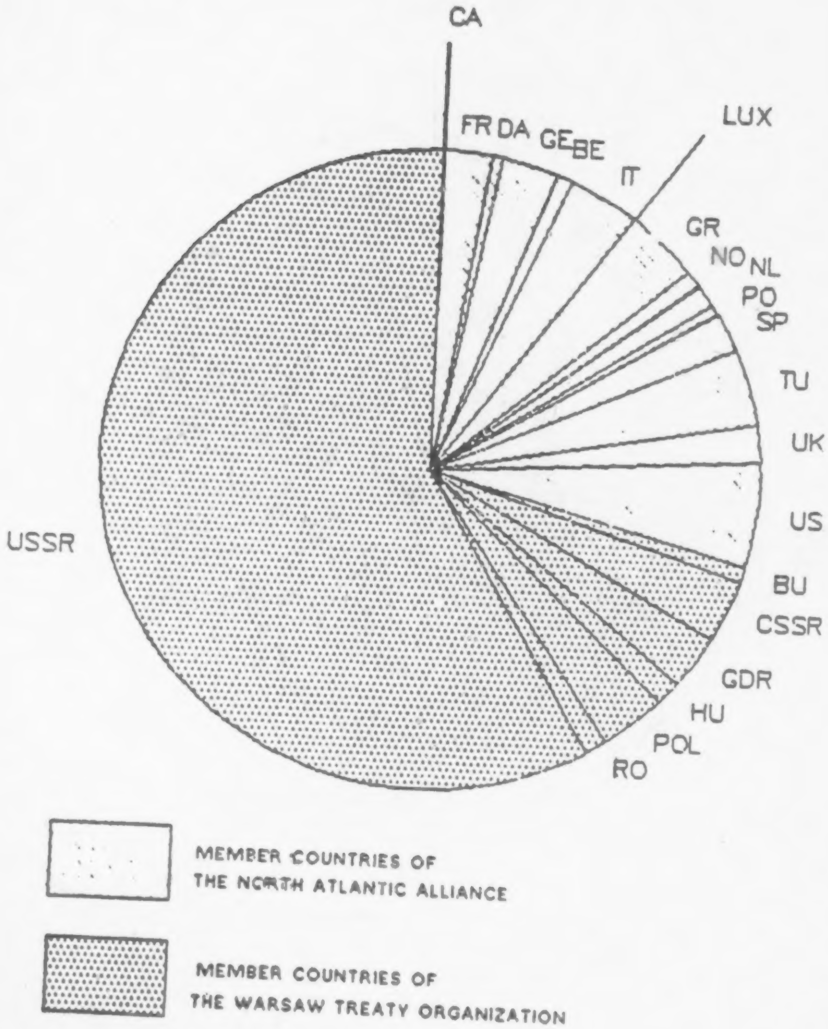
▨	MEMBER COUNTRIES OF THE NORTH ATLANTIC ALLIANCE
▒	MEMBER COUNTRIES OF THE WARSAW TREATY ORGANIZATION

ARTILLERY
(IN UNITS)



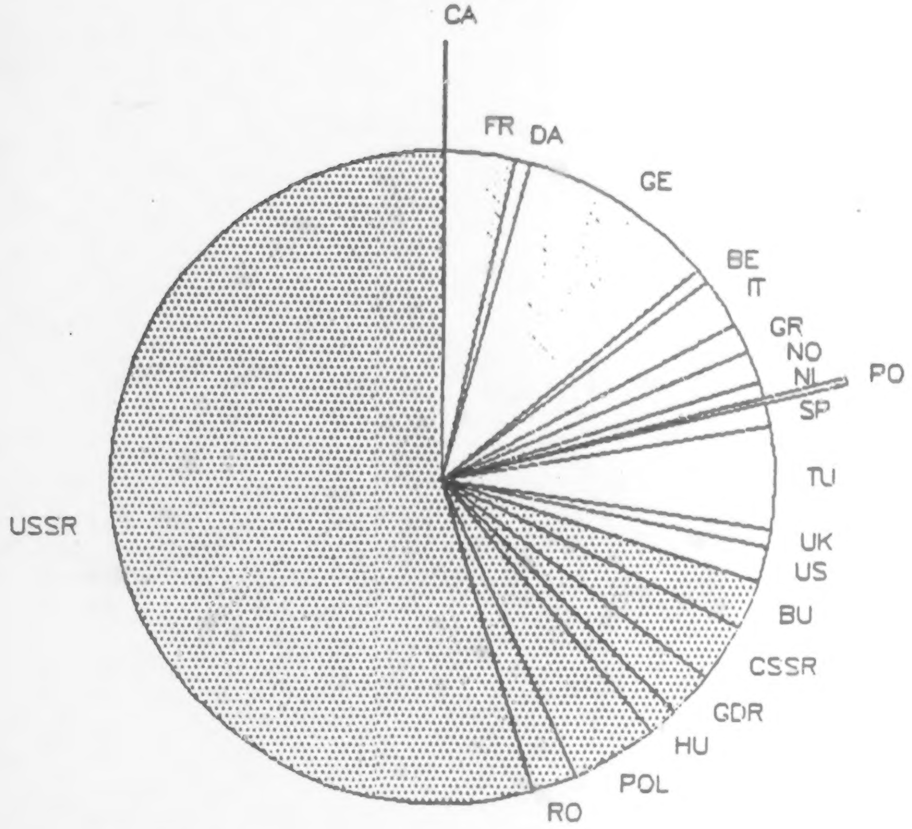
ANTI-TANK WEAPONS

(IN UNITS)



AIR DEFENCE SYSTEMS

(IN UNITS)

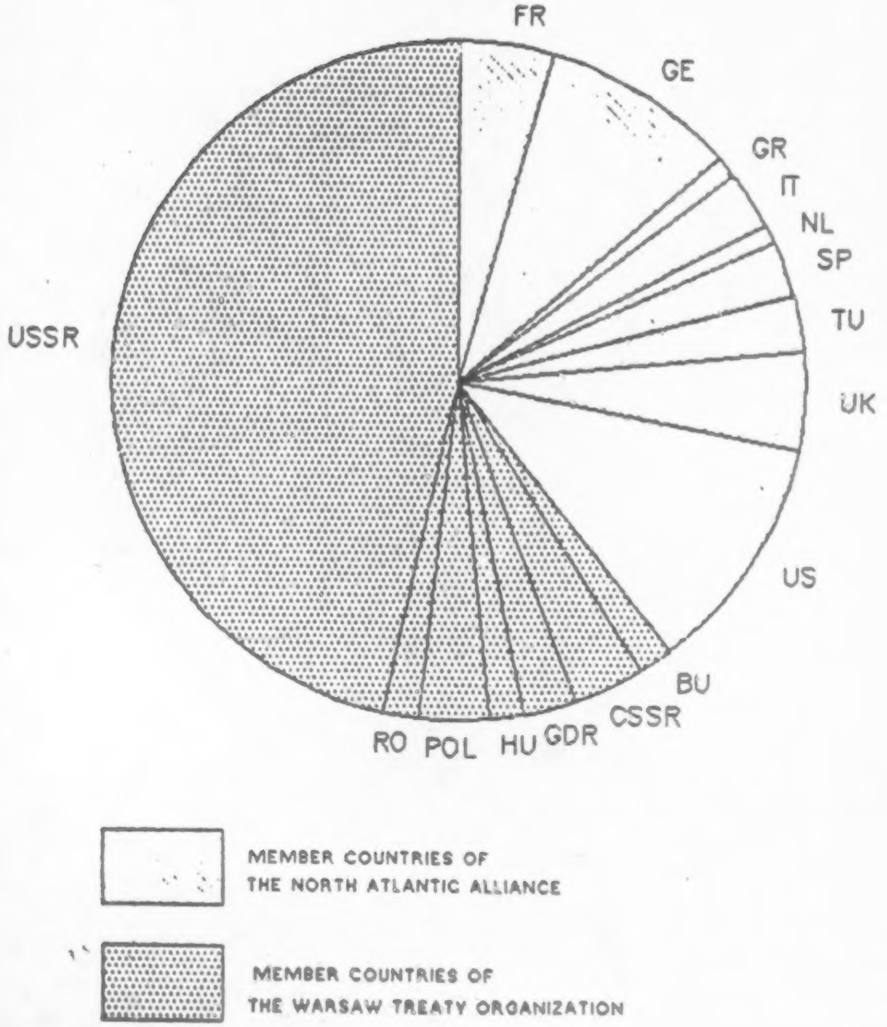


☐ MEMBER COUNTRIES OF THE NORTH ATLANTIC ALLIANCE

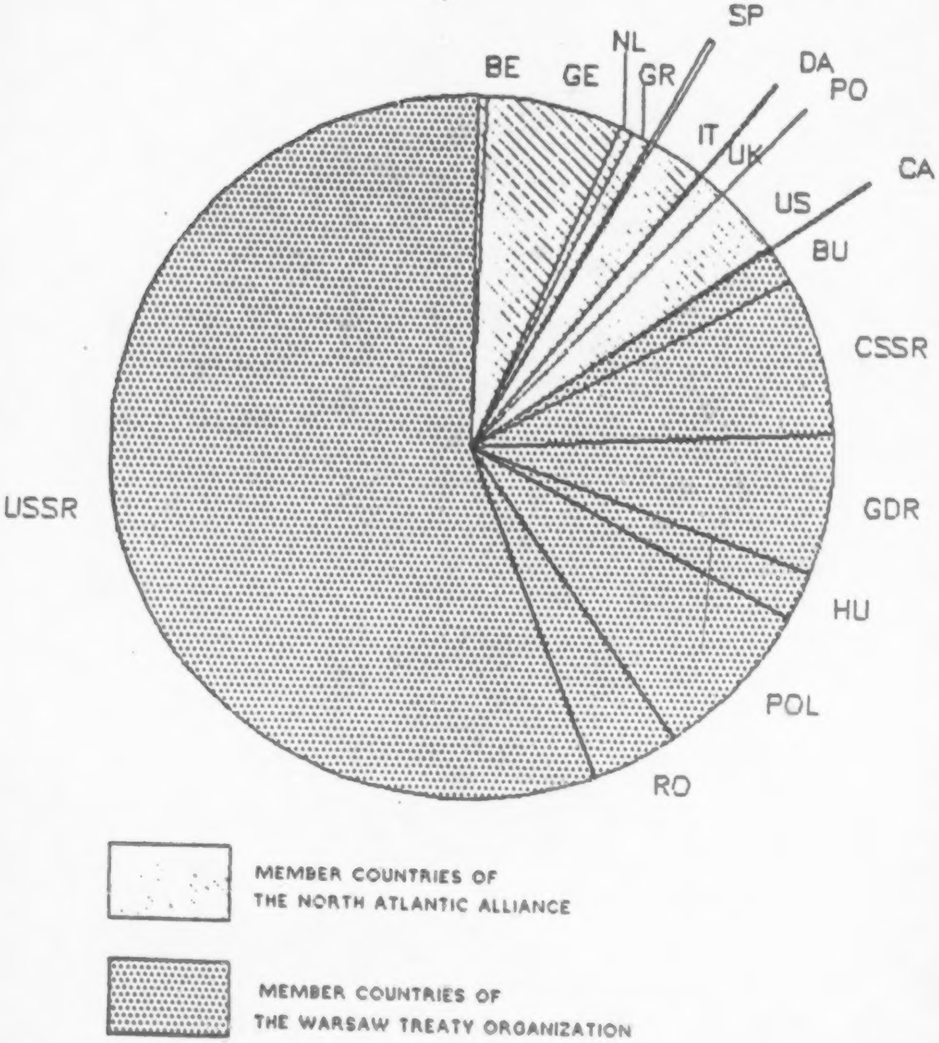
▨ MEMBER COUNTRIES OF THE WARSAW TREATY ORGANIZATION

HELICOPTERS

(IN UNITS)

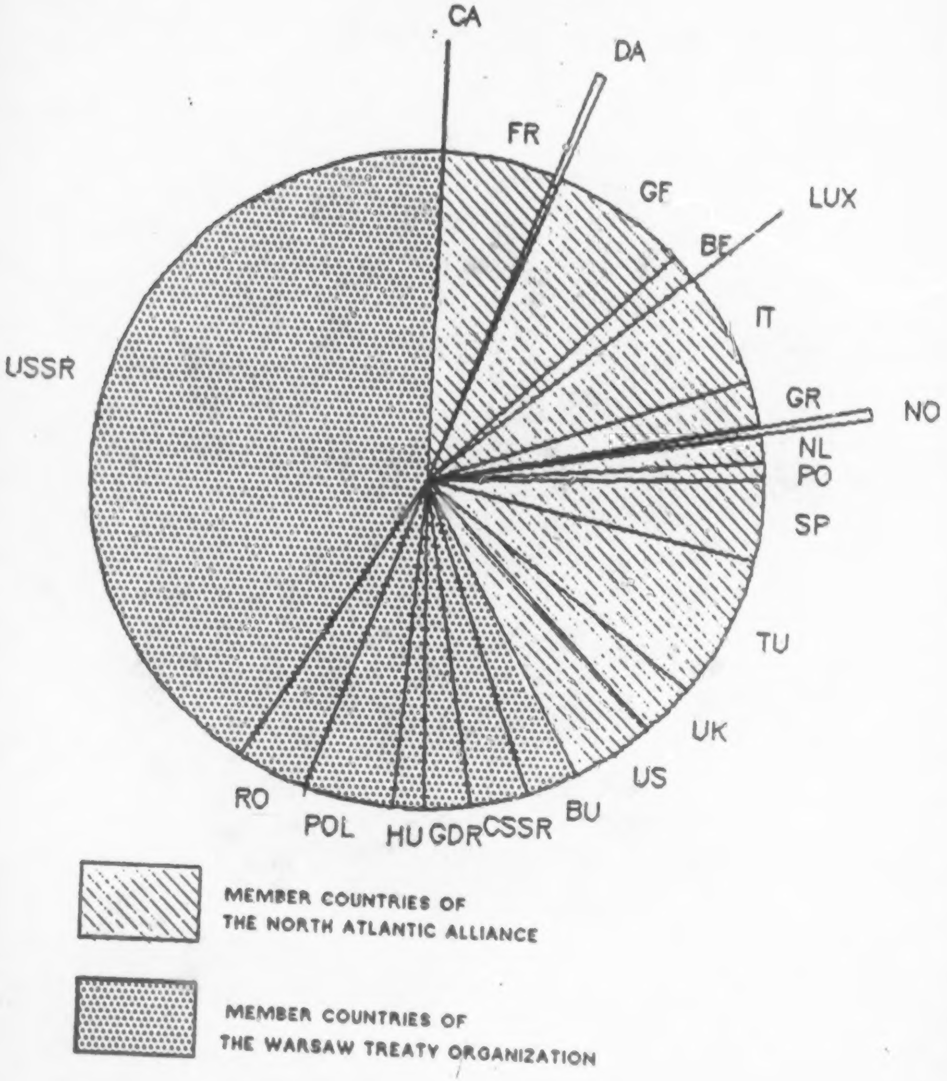


ARMOURED VEHICLE LAUNCHED BRIDGES
(IN UNITS)



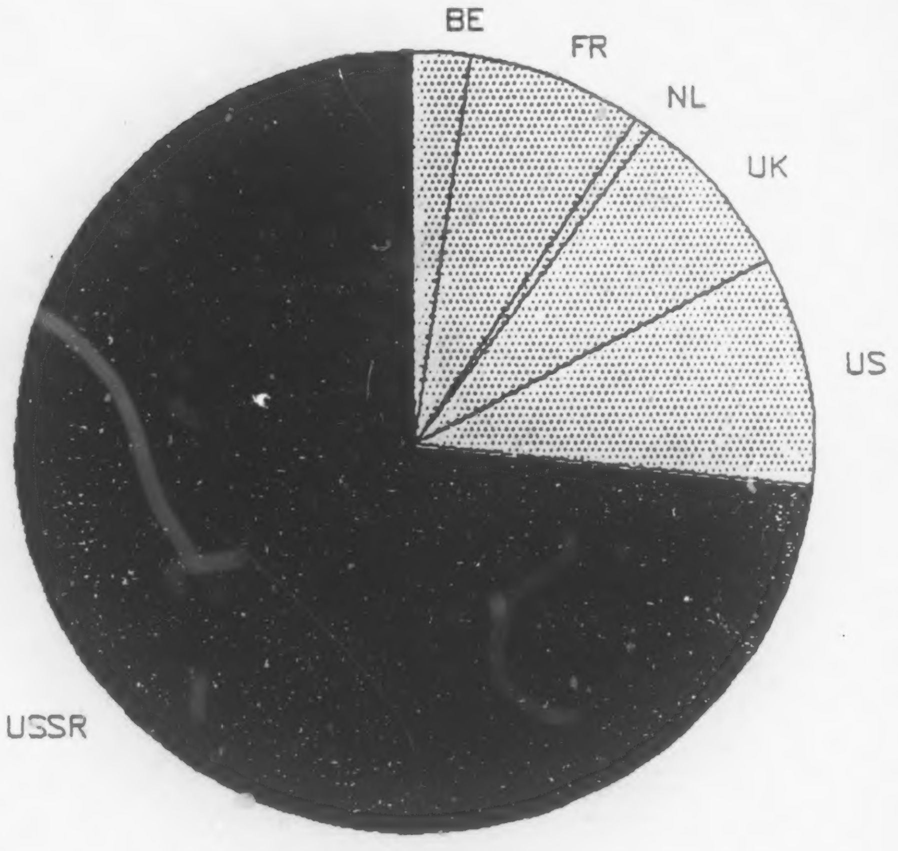
PERSONNEL

(Ground Forces)

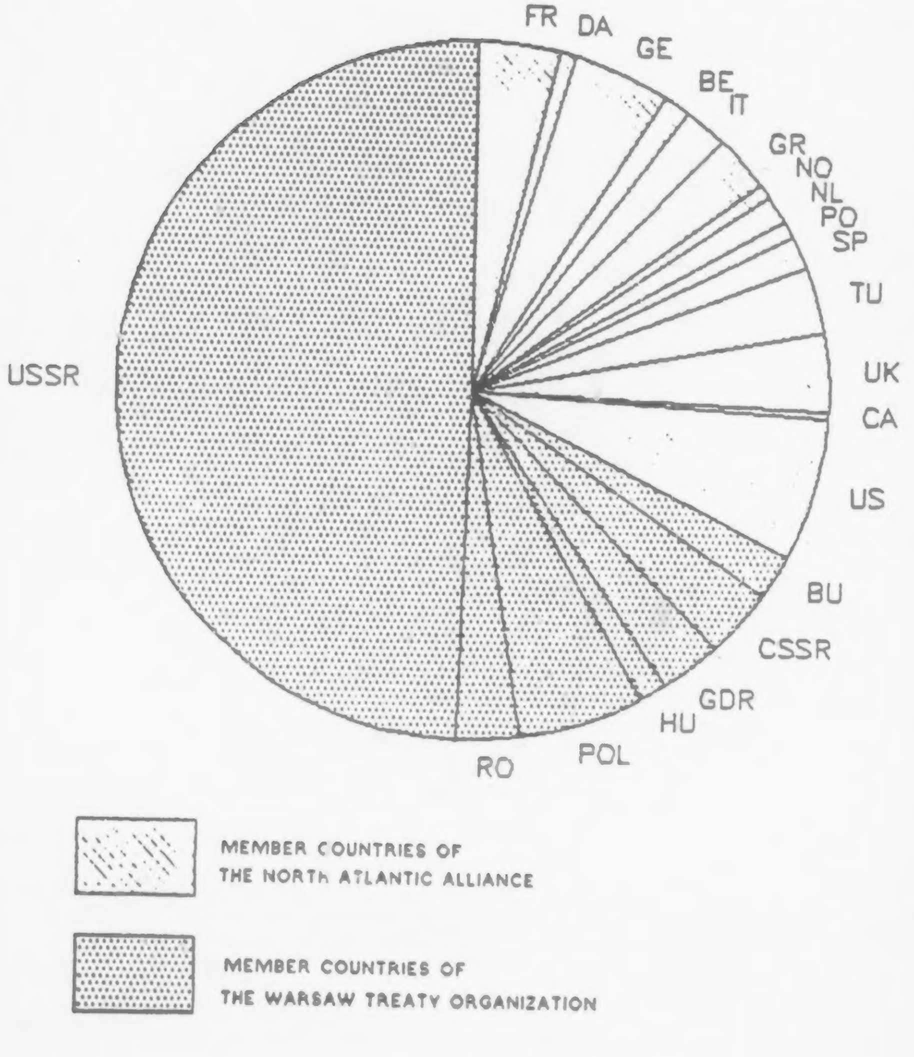


DIVISIONS

STATIONED OUTSIDE NATIONAL TERRITORY



COMBAT AIRCRAFT
(IN UNITS)



AIRCRAFT

Aircraft are, by nature, highly mobile and possess such inherent flexibility that it is difficult to attribute them to a particular region. Moreover, most modern aircraft are capable of performing more than one role and cannot therefore be easily categorized. Any figures for aircraft in the European theatre are thus inevitably somewhat selective. The following table gives national holdings as of January 1988 of combat aircraft stationed on land in Europe from the Atlantic to the Urals.

Senator McCain. General Vuono, could you provide such figures for 1980 and 1989 so we can understand the trends involved?

General Vuono. Unfortunately I cannot provide those figures in the category of Atlantic to the Urals, as that is a new accounting undertaken for the Conventional Forces in Europe (CFE) negotiations. What I think may be helpful in establishing trends from 1980 to 1989 is a comparison of major categories of weapons and land forces between NATO and the Warsaw Pact. The comparison is not all inclusive but reflects current and programmed levels of equipment and land forces. Soviet emphasis on conventional force improvements is exemplified by the quantity of tanks, armored troop carriers (ATCs), and artillery in their inventories during the period of the comparison. In 1980 for example, the U.S. portion of heavy/medium tanks in NATO was approximately 8,000 of NATO's total of slightly less than 20,000 tanks. The USSR's tank forces during the same period numbered in excess of 50,000 tanks, with an additional 12,000(+) Non-Soviet Warsaw Pact (NSWP) tanks added for a total of approximately 65,000 versus less than 20,000 for NATO. In 1989 USSR/NSWP tanks totalled approximately 68,000 to U.S./NATO's 21,000.

In the category of armored troop carriers (ATCs) the comparison is equally telling. During 1980 the U.S. had less than 10,000 ATCs in an alliance total of under 23,000. The USSR/NSWP ATC total for the same period was just under 60,000. In 1989 a comparison of the two alliances' ATCs reflects a U.S./NATO total of 37,000 with the current USSR/NSWP figure at 75,000(+). Although the number of USSR ATCs is expected to decline in future years, it will remain near 16,000 versus 6,000 for the U.S.

The Warsaw Pact also enjoys a significant advantage in indirect fire systems (artillery, mortars, rocket launchers greater than 100mm). Even though Soviet artillery outnumbered U.S. systems by 3.5:1 in 1980, the Soviets continued to expand and modernize their inventories. Soviet production rates are expected to remain high; the Soviets are in the process of replacing their towed artillery with self-propelled systems ranging in size from 120mm to 240mm. In 1989, the Warsaw Pact artillery outnumbered NATO by more than 40,000 systems, 60,000 versus 18,000.

An overall indicator of alliance readiness is a comparison of NATO and Warsaw Pact ground force divisions—ready and not ready (ready being active divisions; not ready reserves). In 1980, the Warsaw Pact fielded approximately 180 divisions to NATO's 100. In 1989 the number of divisions remain virtually unchanged. However, a higher percentage of NATO divisions are classified as ready. Although NATO's overall manpower strength is good, many units are short critical specialities. In the event of war, these divisions would require approximately 4 months to produce individual replacement "fillers." As a comparison, Soviet reserve divisions would take approximately 3 to 6 months to produce combat ready forces. Overall, the Soviet/Warsaw Pact continues to maintain an advantage in ground combat capability. That advantage will continue even following the unilateral reductions presently being implemented.

Senator McCain. Could you provide such comparisons for the central region, Northern Flank, Southern Flank, and the Atlantic to the Urals?

General Vuono. I have already provided the data for the Atlantic to the Urals. A similar comparison does not presently exist in an unclassified form for the other regions you have asked about. Complicating such comparisons is the way the Soviets and Warsaw Pact apportion forces against NATO. They do not apportion forces to the flanks. For example, forces in the Western TVD which faces NATO's Central Region are also programmed against NATO's Northern Flank in a reinforcing role. Likewise, Warsaw Pact forces in the Southwestern TVD whose primary missions are oriented south into Greece and Turkey have secondary missions in support of the Western TVD. The following comparisons are from unclassified sources and reflect data prior to the unilateral withdrawals announced by the Soviet Union and Warsaw Pact.

The Western TVD is oriented against NATO's Central Region and has a combined USSR/Non-Soviet Warsaw Pact (NSWP) strength of 92 divisions versus 38 for NATO. The main battle tank figures for the region also reflect a market disparity in the Warsaw Pacts favor, 29,400 to 9,455. Equally telling are the armored personnel carriers (APCs) infantry fighting vehicles (IFVs) comparisons, 32,650 to 27,681. The artillery figures (systems greater than 100mm) for the Western TVD versus the Central Region continue the trend of Soviet/Warsaw Pact conventional dominance, 23,100 to NATO's 5,986.

The Soviet Northwestern TVD opposes NATO's Northern Flank and is comprised of 12 divisions with 1,350 tanks, 3,750 APCs/IFVs, and in excess of 2,100 artillery systems greater than 100mm. NATO's forces in the region consist of five divisions comprised of less than 400 tanks and 520 in place artillery systems.

The Southwestern TVD focused on NATO's Southern Flank does not reflect as great a disparity in total numbers. Actual USSR/NSWP divisions number 42 versus NATO's 45; however, this comparison is misleading due to the number of Turkish infantry divisions (14) in the total. These divisions are poorly equipped and have only limited mobility. USSR/NSWP tanks number 13,200 to NATO's 5,986; APC/IFVs 10,920 to NATO's 8,722 (only 100 are infantry fighting vehicles); and artillery comparisons reflect USSR/NSWP with an advantage of 10,050 to 7,912 for NATO.

The Soviets fervently believe only ground forces can seize and hold territory. Their history and geography have led them to emphasize the development and deployment of ground forces based on this axiom. Although announced unilateral reductions and future arms central negotiations may reduce the numbers of forces and systems deployed, they will not diminish the critical role of land armies in Soviet doctrine and strategy.

LHX

Senator McCain. Army testimony shows a requirement for 1,031 AH-64s, 930 AH-1s, and 2,469 Scout-Observation helicopters. Of these, the 930 AH-1s and 1,166 of the Scout helicopters were to be replaced by the 2,096 LHXs.

Now that only 807 Apaches will be built, will the Army require more LHXs, retain the AH-1s longer or simply cut the force? If it is the latter, explain in detail what has changed in the threat to justify that reduction.

General Vuono. The Army will not require additional LHXs since the LHX was not designed as a replacement for the AH-64. OSD budget decisions resulted in elimination of seven AH-64 battalions which corresponds to the reduction of procurement for AH-64s. This reduction will cause a subsequent reduction in the total Army end strength (Active, Reserve, and Army National Guard). Longer retention of some AH-1s will occur because of the termination of the AHIP at 207. These actions are not related to any change in threat posture but rather to budget constraints.

Senator McCain. Low rate initial production for the LHX is scheduled to start in November 1994. Is that considered a low, medium, or high risk schedule?

General Vuono. LHX Rate Initial Productuion (LRIP) is considered low-to-medium risk at this time. During the on-going Demonstration/Validation phase, two competing industry teams are conducting hardware demonstrations of essential mission equipment package and airframe technologies. These will be completed in September 1990 and provide the basis for entering full scale development (FSD). Both teams are already conducting Producibility Engineering and Planning (PEP) to enhance successful transition to LRIP. FSD prototype aircraft will be built using pilot production tooling to further alleviate potential production start-up difficulties. The LHX development schedule has been fully coordinated with the industry teams to ensure there is sufficient time to complete all planned scope of work with adequate testing. The T800 engine LRIP schedule is low risk. It is on schedule, within cost, and has bettered performance requirements.

Senator McCain. What are the optimistic and pessimistic estimates for starting LHX low rate production?

General Vuono. The LRIP contract award date is November 1994. There is no earlier "optimistic" LRIP date since program funding is structured to the November 1994 contract award. The LRIP date will result in an early fiscal year 1997 Initial Operational Capability (IOC). The pessimistic date is mid-1995 and would result in a late fiscal year 1997 or early fiscal year 1998 IOC.

MAJOR SYSTEM DEVELOPMENT

Senator McCain. Has the Army ever brought a major weapon systems development in on schedule? If so, what were they?

General Vuono. The Army has 17 major weapon systems that are currently in production. Based on the fielding schedule projected at the Milestone I Decision Review for each of the major systems, the Army has fielded seven (7) of these major systems within the year of the projected schedule. These systems were Pershing II, OH-58D AHIP, CH-47D Cargo Helicopter, UH-60 Black Hawk Helicopter, M1A1 Tank, TOW-2 Missile, and the Multiple Launch Rocket System.

Senator McCain. The LHX program already has slipped since its initiation. Why should we believe additional slips will not occur?

General Vuono. The LHX program has not slipped. The Defense Acquisition Board (DAB) approved the LHX for entry into the competitive Demonstration/Validation (Dem/Val) phase in June 1988 at the Milestone I review. The program approved by the DAB was predicated on a fiscal year 1997 Initial Operational Capability (IOC) and initiation of Dem/Val in late 1988. Dem/Val contracts were initiated on schedule and are proceeding smoothly. The Army is confident that if the LHX program receives planned funding, the development will proceed on schedule and provide the Army with a highly combat effective and supportable replacement for the current light helicopter scout/attack fleet. This confidence is further substantiated by the highly successful T800 engine development program for the LHX. Competitive contracts awarded in 1985 for testing through Preliminary Flight Rating were completed on schedule and within cost. Continuation of the T800 development through Qualification Test is likewise on schedule and within cost.

LHX

Senator McCain. For the period 1985–2000, provide a yearly comparison of U.S. NATO (less U.S.), Soviet and Warsaw Pact (less Soviet) of actual or projected attacked helicopter production.

General Vuono. Production rates for U.S. attack helicopters (APACHE production 1985 through 1993. LHX production begins in 1995 and extends through 2000.) are as follows:

U.S. PRODUCTION

Year	Quantity	Year	Quantity
1985	59	1993	72
1986	112	1994	0
1987	138	1995	24
1988	116	1996	78
1989	101	1997	98
1990	77	1998	144
1991	72	1999	180
1992	60	2000	216

NATO—LESS U.S. PRODUCTION

Year	Quantity	Year	Quantity
1985	[Deleted.]	1993	[Deleted.]
1986	Do.	1994	Do.
1987	Do.	1995	Do.
1988	Do.	1996	Do.
1989	Do.	1997	Do.
1990	Do.	1998	Do.
1991	Do.	1999	Do.
1992	Do.	2000	Do.

SOVIET ATTACK HELICOPTER PRODUCTION

Year	Quantity	Year	Quantity
1985	[Deleted.]	1993	[Deleted.]
1986	Do.	1994	Do.
1987	Do.	1995	Do.
1988	Do.	1996	Do.
1989	Do.	1997	Do.
1990	Do.	1998	Do.

SOVIET ATTACK HELICOPTER PRODUCTION—Continued

Year	Quantity	Year	Quantity
1991	Do.	1999	Do.
1992	Do.	2000	Do.

It should be noted that many attack helicopters produced by both the Soviets and NATO countries are sold to third party nations; therefore, the production numbers do not equate to helicopters deployed within their own forces.

Senator McCAIN. Were any of the field CINCs consulted about the decision to truncate the APACHE program? If so, what were their responses?

General VUONO. The field CINCs received notification of the impending decision to truncate the APACHE program through the Program Budget Decision (PBD). We did receive a message of concern from CINCCENT and his concerns were incorporated into the final decision.

AH-64 TERMINATION

Senator McCAIN. General Vuono, specifically, how will the AH-64 termination increase our national security posture over the next 10 years?

General VUONO. The Army had to make some tough choices to stay within the President's budget guidelines. Trade-offs made supported the best security posture achievable. Termination of AH-64s still procures 807 aircraft which supports 40 of the 47 battalions for which we could provide resources. Assuming all 47 battalions made it to the fight, this equates to a 15 percent reduction in AH-64 tank killing capability. However, some of our NG AH-64 battalions do not arrive until after D+60. This is an acceptable near-term risk that will be offset further by the fielding of LHX, a Scout aircraft, in fiscal year 1997.

APACHE

Senator McCAIN. What would be the impact of restoring the fiscal year 1992-1994 Apache production under multiyear procurement?

General VUONO. Restoration of Apache fiscal year 1992-94 multiyear procurement without a corresponding increase in funds from other than Army sources would seriously jeopardize the Army's ability to balance near term and future capabilities. The Army will have 807 Apaches which constitutes a very robust warfighting capability that satisfies current force structure requirements.

KILL RATIOS

Senator McCAIN. What are the postulated exchange ratios or kill ratios for the AH-1S, AH-64 and LHX?

General VUONO. We have evaluated and continue to evaluate our attack helicopter capability against the present and future threat using high resolution modeling techniques. Kill ratios vary from exercise to exercise given the level of the threat and the exercise parameters. Given the threat in the 1996 time frame, our system exchange ratios indicate that on the average AH-64 will be 4.37 times more effective against the threat than the AH-1 and the LHX, even though it is being optimized as an armed reconnaissance aircraft instead of an attack aircraft, will be 2.5 times more effective than the AH-64.

[Whereupon, at 12:43 p.m., the hearing was adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991

WEDNESDAY, MAY 10, 1989

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

FIVE YEAR DEFENSE PROGRAM

The subcommittee met in open session, pursuant to notice, at 2:03 p.m. in room 222, Russell Senate Office Building, Senator Sam Nunn (chairman) presiding.

Committee members present: Senators Nunn, Exon, Levin, Dixon, Wirth, Warner, Thurmond, Gorton, and Representative Ireland.

Committee staff members present: Arnold L. Punaro, staff director; Andrew S. Effron, general counsel; John N. McConnell, system manager; and Daniel G. Sakura, research assistant.

Professional staff members present: John H. Hamre, William E. Hoehn, Jr., David S. Lyles, Michael J. McCord and William H. Smith.

Minority staff members present: Patrick A. Tucker, minority staff director and counsel; Robert F. Bott, George W. Lauffer, and Ann Elise Sauer, professional staff members.

Staff assistants present: Lori M. Jackson, Kelli J. Pronovost, and Debra A. Rice.

Committee members' assistants present: Jeffrey B. Subko, assistant to Senator Exon; Kenneth N. Luongo, assistant to Senator Levin; Milton D. Beach, assistant to Senator Glenn; Jefferson B. Seabright, assistant to Senator Wirth; Anthony H. Cordesman, assistant to Senator McCain; Robert M. Soofer, assistant to Senator Gorton; Charles Pearcy, assistant to Senator Lott; and Eric H. Thoemmes, assistant to Senator Coats.

OPENING STATEMENT OF SENATOR SAM NUNN, CHAIRMAN

Chairman NUNN. The committee will come to order. The committee meets this afternoon to receive the testimony from the Honorable Charles A. Bowsher, the Comptroller General.

At the outset, Mr. Bowsher, let me thank you and all the dedicated people of the General Accounting Office for the assistance we receive throughout the year. This committee relies on you for numerous items and you always come through. You have been particularly supportive this year with some emergency requests for personnel where we had matters that were beyond our ability to deal with here with just our staff, and you have been very, very helpful. Your people have done a very fine job in every instance.

This is the third consecutive year that the Armed Services Committee has asked Mr. Bowsher to testify on the General Accounting Office assessment of the administration's budget submission.

This is the first year, however, that the Congress and the GAO have had an opportunity to study the associated Five-Year Defense Program, and that is in response to legislation that was enacted a couple of years ago.

In preparing for this hearing, we have asked Mr. Bowsher to consider three main questions in his testimony.

The questions are: first, what is the status of our military establishment and our national security efforts as we end the decade of the 1980s.

Second, what key improvements over the past 8 years do we need to preserve, and what deficiencies remain to be addressed.

Third, how well does the Five-Year Defense Program being proposed by the Bush administration preserve the key improvements and where does it fail to correct deficiencies.

The committee is especially interested in production rates for major weapons systems and the inefficiency of stretchouts. We also are interested most particularly in whether this Five-Year Defense Program is realistic, whether it is realistically priced, and whether we are going to run into a number of problems down the road that do not readily jump out today in terms of their recognition.

This hearing should provide the committee with valuable information as we review and revise the amended budget request.

Senator Warner is on his way, and I am delighted today to have Representative Andy Ireland here, a Member of the House of Representatives. He has been involved and working in the area of the Five-year Defense Program for several years. He has been working to try to help those of us who are working with him. All of us have had the goal of trying to make that Five-Year Defense Program a realistic plan that indeed can be a sound foundation for defense programming and budgeting within the building and can also give all of us an indication of what the implications of today's decisions are on the future.

So, Representative Ireland, we are delighted to have you here this afternoon. I do not know whether you have any comments you would like to make or any statements that you would like to put in the record, but I would recognize you first. Then we will turn to Comptroller Bowsher.

STATEMENT OF HON. ANDY IRELAND, A U.S. REPRESENTATIVE FROM THE STATE OF FLORIDA

Mr. **Ireland**. Thank you, Mr. Chairman. I thank you for your hospitality and for what I think is an important interest in long-range planning, something that we have always needed but in today's world I think need even more. Credible long-range planning, and having a credible 5-year plan I think is just essential to the good economic and security health of this Nation.

I look forward to hearing the testimony of the gentlemen from the GAO. They have indeed, as you said, done an outstanding job. In particular, I have focused on what is known as the negative funding wedge, which is part of attaining credibility, which is the backbone of having an overall creditable plan that we can use as a tool in the future.

So, I am delighted to be here and I appreciate the opportunity to sit in.

[The prepared statement and other related items of Representative Ireland follow:]

Prepared Statement By Representative Andy Ireland

When I expressed concern over the $45 billion "negative funding wedge," the Department of Defense provided a response with which I disagreed. I asked the General Accounting Office to look into the matter again, and the GAO has backed up my original contention that the $45 billion wedge makes for chaos in defense spending. Today I am releasing the correspondence from the Pentagon along with the GAO's response.

The GAO has provided a detailed response to the Pentagon's rational for a $45 billion discrepancy between its Five-Year Defense Program and the President's budget. The GAO agrees that the five-year program and the Pentagon's rationale is flawed. No matter how you slice it, there will never be enough money in the budget to cover all the programs the Pentagon wants to undertake over the next five years. Unless we do a better job of future planning, we'll face more and more costly V22-style weapons system cancellations in the future.

The time has come to use the 5-year plan as a credible planning tool. In order to make sound decisions on national defense spending, both Congress and the Pentagon must make honest assessments of long-term program costs. We must correct our one-year myopia and understand the long-term consequences of the decisions we make today. I'm delighted that Senator Nunn has called a hearing to address the five-year plan, its problems and potential. This is the first step in what could be a fundamental change in the way the Congress does business with the Department of Defense.

U.S. General Accounting Office,
National Security and International Affairs Division,
Washington, DC, May 8, 1989.

Hon. Andy Ireland,
House of Representatives,
Washington, DC.

Dear Mr. Ireland: This letter is in response to your May 3, 1989, request concerning the use of negative program planning entries in DOD's Five Year Defense Program (FYDP) and an undistributed contingencies account.

The procurement line in the FYDP contains $21.7 billion more than is included in the topline figures of the President's budget. Also, there is a new line entitled "unanticipated requirements" that totals $23.3 billion for which there is no defined programmatic content at this time. Together, these positive additions total $45 billion. Under current fiscal guidance, the entire $45 billion would have to be eliminated to come in line with the President's topline estimates. In the meantime, the $21.7 billion in procurement and the $23.3 billion in allowances for unanticipated requirements is being offset by a single negative entry called "program estimates". The single negative entry offsets the two positive additions in each of the three outyears so that the FYDP toplines will be consistent with the President's budget submission. No other positive or negative planning wedges are evident in the FYDP.

You also asked about the undistributed contingencies account. In the past this account retained sums to cover potential future pay raises, amounts for future undefined initiatives, and amounts to cover legislative proposals. Currently, this account contains only a small amount to cover future legislative proposals. Estimates to account for future pay raises are now contained in the Military Personnel and Operations and Maintenance accounts. The undistributed contingencies account in the last FYDP (FY 1988-92), contained $19.6 billion to cover future, but not yet defined, initiatives. This amount was eliminated as part of the $311 billion in FYDP reductions DOD made between fiscal years 1988 and 1994.

As we stated in our April 21, 1989, letter to you we are concerned that programming in excess of the established fiscal guidance delays and compounds difficult decisions necessary to bring the FYDP within current fiscal realities. When program planning becomes detached from reality it provides an inaccurate view of the future and can hinder rather than assist current decisionmaking.

We are continuing our review of DOD's fiscal year 1990-94 FYDP and will keep your staff advised on the progress of this work.

Sincerely yours,

PAUL F. MATH,
Director of Research, Development, Acquisition, and Procurement Issues.

THE SECRETARY OF DEFENSE,
Washington, DC, April 27, 1989.

Hon. ANDY IRELAND,
House of Representatives,
Washington, DC.

DEAR CONGRESSMAN: This is in response to your letter of April 6 in which you requested that I address the negative funding wedge in the current Five Year Defense Program (FYDP).

On January 11, in accordance with Section 1203 of the FY 1988 Defense Authorization Act, the Department of Defense transmitted the FY 1990-1994 FYDP to the Congress. The FYDP was consistent with the biennial budget request for FY 1990 and FY 1991. Although the DOD program for FY 1992-1994 was consistent with the budget topline for 2 percent annual real growth, it did not contain the same level of detail, or same degree of precision as for the budget years. Experience has shown that over the next several years, unanticipated requirements will materialize, but these will be more than offset by reductions to the programs now planned. We have found that as an outyear program becomes a budget proposal, it should be possible to "scrub" the net cost of the program by 2 to 3 percent. Therefore, the FY 1992-1994 programs were developed at approximately 2 percent higher levels than the corresponding budget targets for FY 1990-1991. The fact that our outyear programs were 2 percent higher, and the logic for their being so, were described in Deputy Secretary Taft's letters forwarding the FYDP to the Congress.

In your letter, to me, you mentioned the figure of $45 billion shown in the FYDP as a negative "Program Estimates" entry over FY 1992-1994. That is only part of the calculation explained above and described in Mr. Taft's FYDP cover letters. The other part is the sum of $23.3 billion shown as a positive "Unanticipated Requirements" entry for the same 3 years. That "wedge" lacks specific programmatic content, which by definition does not exist at present. The real size of the FY 1992-1994 "negative wedge" that concerns you is therefore not $45 billion, but $21.7 billion, which is slightly over 2 percent of the program total for those years.

As you know the Department had just over 2 months to identify defense budget reductions agreed to by President Bush. The primary focus has necessarily been on the FY 1990/FY 1991 biennial budget, although we have also reduced FY 1992-1994 programs significantly. I will decide whether having a higher outyear program is desirable, and if so by what amount it should be higher, when I put together my first complete Defense program.

I appreciate your support of the defense budget and if I can be of further assistance, please let me know.

Sincerely,

DICK CHENEY.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, DC, May 3, 1989.

Hon. CHARLES A. BOWSHER,
Comptroller General, General Accounting Office,
Washington, DC.

DEAR MR. BOWSHER: I am writing first to thank your staff for the excellent work done for me on the Five Year Defense Program (FYDP) and secondly to request some additional support in the same area.

First, Mr. Bill Crocker, an economist in your National Security and International Affairs Division, is doing an outstanding job evaluating the FYDP. He was instrumental in preparing a report on the $45 billion negative funding wedge on very short notice that I used as a foundation in preparing for Secretary of Defense Dick Cheney's appearance before the Armed Services Committee on April 25th. My statements and line of questioning on the negative wedge generated national attention in the news media, and I have the distinct impression that Mr. Cheney is having second thoughts about the wisdom of using such devices in the future. For that, I wish to extend a special word of thanks to Mr. Crocker for a job well done.

Secondly, Secretary Cheney argues that my position on the negative wedge is technically flawed, and I need your help in responding to his assertions.

During a TV news interview immediately after the hearing, Secretary Cheney said I was "dead wrong" about the negative wedge and was "confusing apples and oranges." He has now made a formal and more detailed written rebuttal. In a letter to me dated April 27, 1989, he contends that the negative wedge is not $45 billion but $21.7 billion. He claims that the $45 billion negative wedge is partially offset by a $23.3 billion positive wedge described as "Unanticipated Requirements." A copy of his letter is attached for your information.

I need a more comprehensive understanding of how wedges are used in the FYDP. In addition to negative "Program Estimates" and "Undistributed Requirements," I am told there is yet another one called "Undistributed Contingencies." How many more wedges are there? What is their net effect? Have they ever been used before? What are the reasons for using wedges? Are those reasons valid? In order to respond to Mr. Cheney's letter in a meaningful and timely fashion, I need the answers to those questions as soon as possible but no later than Monday, May 8th. Transmitting them to me in the form of a letter would be most satisfactory.

I understand that you will be testifying before the Senate Armed Services Committee on May 10th on the FYDP and related matters. I further understand that your testimony and associated briefing material is in the final stages of preparation and that you should soon be in a position to brief the Committee members and staff in advance of the hearing. Consistent with my requests to you of January 10, 1989, and February 3, 1989, for periodic briefings on the results of your long-term FYDP evaluation and compliance with Section 114, of Title 10, U.S. Code, I request that I be briefed in advance of the hearing as well or at the same time as the Senate Armed Services Committee.

Your cooperation in this matter would be appreciated. I look forward to your continued assistance and support in the future.

Kind regards.

Sincerely,

ANDY IRELAND.

Chairman NUNN. Thank you very much, Congressman.

Senator Dixon has a prepared statement which shall be entered into the record.

[The prepared statement of Senator Dixon follows:]

PREPARED STATEMENT BY SENATOR ALAN J. DIXON

Mr. Chairman, I am pleased to welcome the Comptroller General of the U.S. Accounting Office, Mr. Charles A. Bowsher. The investigative role of his office is a critical ingredient of our deliberative process.

The administration has recently sent to Congress its defense budget covering the 1990–1994 timeframe. Because of severe funding constraints, the administration has recommended severe cuts in several programs and canceled others, with the Navy being the hardest hit among the services. I hope the Comptroller General can give us a complete accounting of what our savings will be and how our defense capabilities will be affected as a result of these program cuts or cancellations.

Reasonable men reach dissimilar conclusions on the same issue. There are several Members of Congress that disagree with a number of administration proposals. For example, several Members have expressed an interest in keeping alive the V-22 Osprey transport helicopter, while others are interested in killing one of the two proposed strategic missile systems.

We have the difficult task of sorting out which options to select concerning our defense program. The General Accounting Office, as it has so often done in the past, can provide us with invaluable information that we can use in our deliberations. I look forward to Mr. Bowsher's testimony.

Chairman NUNN. Mr. Bowsher, I know you have with you a familiar face to all of us, Frank Conahan. We are delighted to have him today and know that he is a vital part of your effort in the overall security field.

So, Frank, we are delighted to have you here also. You may proceed.

STATEMENT OF CHARLES A. BOWSHER, COMPTROLLER GENERAL OF THE UNITED STATES, U.S. GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY FRANK C. CONAHAN, ASSISTANT COMPTROLLER GENERAL FOR NATIONAL SECURITY AND INTERNATIONAL AFFAIRS, U.S. GENERAL ACCOUNTING OFFICE

Mr. BOWSHER. Thank you very much, Mr. Chairman. I have a lengthy statement, but what I will try to do is read parts of it and summarize parts of it so that we can get through.

First, I would just like to thank both you and Congressman Ireland for the words that you said about the GAO. We——

Chairman NUNN. You do not have to cut it too short because we are interested in what you have to say, sir.

Mr. BOWSHER. All right.

Chairman NUNN. So do not feel under any real time constraint.

Mr. BOWSHER. All right. Fine. Thank you, Mr. Chairman.

Well, first, we appreciate the opportunity to be here today to review the military capability achievements since 1980 and the current capability deficiencies that have arisen and the reliability of our defense planning.

In our view, one of the greatest challenges facing DOD today is to manage reduced spending after the largest peacetime defense buildup in our Nation's history. DOD's budget has more than doubled from 1980 to 1985. However, since 1986, DOD's budget has been reduced somewhat—but at $290 billion that remains 36 percent higher today—in real terms—than it did in fiscal year 1980. Overall, $2.4 trillion in funding has been provided since 1980.

The increases in defense spending have clearly resulted in gains in overall military capability. However, these gains were not as great as they could have been for the money spent. Gains were made largely by improving overall personnel quality and force readiness, while adding newer equipment to a slightly increased force structure.

DOD's 5-year spending plans contained programming to further improve defense capability and achieve defense buildup goals such as a 600-ship Navy and a 40-wing Air Force. However, these plans assumed funding levels would increase substantially from the 1985 levels.

In actuality, these plans proved unrealistic and unaffordable in light of the mounting Federal deficit. This left DOD with the task of reducing hundreds of billions of dollars in planned spending.

The fiscal years 1988 and 1990 5-year spending plans have been reduced by $311 billion. This was achieved in part by terminating, reducing, delaying and stretching out weapons procurements; retiring some older systems earlier than planned; and through procurement reductions in spare and repair parts, support equipment and facilities.

These reductions required DOD to make force structure changes and reduce maintenance and support goals. However, it is important to keep in mind that these reductions are primarily in planned funding growth. It appears the reductions were made without significantly deteriorating current capability.

I recognize the difficulty of the decisions and tradeoffs the new administrator and Defense Secretary have already made to reduce planned spending. However, I am concerned that further FYDP reductions of about $150 billion will be required if current projected funding growth, inflation and other assumptions are not realized. Reductions of this size will pose even more difficult choices for DOD and the Congress. However, before such reductions are made, a mismatch between resources and national security policy and commitments must be addressed. Linking funding priorities to these strategies within fiscal constraints is the key to achieving realistic planning and stable budget levels. The administration's current national security policy review is a step in that direction.

Let me now address in general terms the military capability achievements and current deficiencies.

First, with the force structure and modernization. Between 1980 and 1989 investment funding totalled more than $1.2 trillion, or 43 percent of the total DOD funding. These funds went largely to the goal of developing and procuring weapon systems and equipment to modernize DOD's force structure.

Overall, I see some important gains. However, certain changes in the force mix do raise capability questions. Also, I have significant reservations about the management of certain weapons system programs that lead me to believe we could have gotten more for our money.

Specifically, some of my major observations on changes to force structure since 1980 are: the Army divisions increased from 24 to 28. The increase in the number of divisions was accomplished while overall personnel strength decreased by about 5,000 personnel. Consequently, Active Army divisions have fewer personnel today than in 1980.

On the other hand, Reserve forces increased by about 196,000 personnel and are more heavily relied on today to meet wartime contingency plans. However, while improved since 1980, the low readiness of the Army reserve raises concerns regarding the ability of these forces to augment and support active forces in the event of a major conflict. Of particular concern are the capabilities of combat service support units.

The Army added large numbers of more capable weapons systems and equipment, such as 5,496 M-1 tanks, 5,076 M-60A3 tanks and 3,180 Bradley fighting vehicles to replace older and obsolete systems and equipment.

However, the acquisition programs also experienced difficulties. For example the Army, after spending over $2 billion, terminated the Division Air Defense Gun program and is still working to develop a new Forward Area Air Defense System. The Aquila, a remotely piloted vehicle program, was also terminated after experiencing development programs, and at a cost of about $800 million. A number of other systems also experienced either delays, technical difficulties, or increased program costs.

The Navy made considerable progress toward achieving its goal of 600 ships, increasing from 479 deployable battle force ships in 1980 to a projected 1989 figure of 568. The increased number of ships enabled the Navy to expand from 13 to 14 carrier battle groups, as well as to add four battleship surface action groups.

The addition of 32 *Los Angeles*-class 688 attack submarines added to its antisubmarine warfare capability, and 10 new Trident submarines improved its strategic capability, and 13 Aegis cruisers added to its air defense capabilities. To support this increased force structure, the Navy experienced the largest increase in active duty personnel among the services, adding about 66,000 personnel since 1980.

During the same period, the inventory of Navy aircraft remained at about the same levels. Concerns were raised by your committee last year as to whether the procurement rate for naval aircraft is sufficient to adequately support projected carrier battle group force structure and prevent further deterioration of the average age of Navy combat aircraft.

Also, we have previously reported that the Navy's force structure is not comprised of the right mix of ships. Specifically, the Navy has a shortfall of anti-air warfare cruisers and destroyers needed to protect its carrier battle groups. The Navy continues to have a shortage of fast sealift capability to support major contingencies.

Additionally, the Navy's force modernization program did not always progress smoothly. For example, we recently reported on operational testing problems with the Mark-48 ADCAP and the Mark-50 torpedo programs. Our prior work also raised questions about the capabilities of the AN/BSY-1 Combat Control and Acoustic Subsystem for the attack submarines.

The Air Force currently has 35 equivalent tactical fighter wings consisting of 72 aircraft each, compared to 31 wings in 1981. There are about 13,000 more active personnel today than in 1980. However, this is 31,000 less than in 1985.

While the inventory of tactical aircraft did not increase significantly, it is now comprised of more modern aircraft such as the F-16 and the F-15. Major changes affecting strategic air forces were the deployment of the Peacekeeper missile, the B-1 aircraft and air launched cruise missiles and increases in the numbers of nuclear warheads.

Airlift capability was increased with the addition of 44 C-5B aircraft to the force structure. However, significant capacity shortfalls still exist.

The Air Force also had problems developing and deploying weapons that met planned capability improvements. For example, the Air Force has experienced significant technical problems in developing a penetrating bomber. The B-1 bomber is experiencing significant technical problems that are affecting performance capabilities. While the B-2 bomber has been reported to have technical problems and schedule slippage.

In addition, we recently reported that the Peacekeeper flight testing programs are more than 2 years behind their original schedules and, as a result, the Air Force has not yet begun its operational test and evaluation program which is designed to confirm that the deployed Peacekeeper will work in its intended environment.

The Marine Corps force structure is the same today as it was in 1980. It has three active and one reserve divisions and wings. The Marine Corps' active end strength increased by about 8,700 personnel during the period, and the Reserve force increased by about 7,900 personnel. Equipment inventory levels remained at approximately the same. However, the Marine Corps has replaced older systems with more capable ones such as the F/A-18 and the AV-88 and the 155 mm howitzer.

Now, overall the key indicators of military readiness show marked improvement. However, a few areas such as Reserve component readiness indicators and depot level maintenance backlogs do provide reasons for concern.

Specifically, my observations on readiness are, one, indicators of unit readiness generally show a continued high overall status in recent years. The greatest gains were in combat support and combat service support units; however, they generally lagged behind the combat units. This reflects the higher priority DOD places on resourcing its combat units.

Further, Reserve components, while showing improvement, lag behind the Active components in all areas except for certain Naval and Air Force Reserve units. As I previously mentioned, Army Reserve component capabilities are an area of concern.

Now, for increased personnel quality, that has been frequently cited by DOD as one of its significant accomplishments, and based on everything I see, this seems to be the case. Indicators of personnel quality such as test scores on the Armed Forces Qualification Test, high school graduate accessions and experience of the force are significantly improved. For example, high school graduates represented 68 percent of DOD's accessions in fiscal year 1980 as compared to 93 percent in fiscal year 1988. A significant increase.

Now, on indicators of training activities, such as flying hours per crew per month, steaming hours for ships and tank training miles, show that levels of training varied. However, the status of personnel training within Active component units was at generally high levels.

Indicators of materiel readiness such as shipboard inventory supply responsiveness, mission capability rates, and cannibalizaton of aircraft spare parts, showed general improvement. For example, Navy and Air Force mission capable rates showed the greatest improvement.

However, depot maintenance backlogs are increasing in all services. In the Air Force, for example, backlogs as a percentage of funding are slightly greater than the 1980 levels.

I also feel it is important to mention at this point that we have reported numerous instances of inefficient supply support practices and the procurement of significant quantities of unrequired items. For example, we have reported that inventories of unrequired stocks grew from $10 billion in 1980 to $28.9 billion in 1987.

Chairman NUNN. Has that figure been updated?

Mr. CONAHAN. We do not have an update.

Mr. BOWSHER. We do not have an updated figure at this point, Mr. Chairman.

Mr. **Conahan**. We have work underway to do that.

Mr. **Bowsher**. Yes. On sustainability. Overall, the sustainability picture has improved in a number of areas since 1980. However, some significant shortfalls still exist.

For example, shortages exist in preferred munitions such as air-to-air, air-to-ground missiles in the Air Force and Navy, and surface-to-air munitions in the Army. It is important to note that these shortages have been identified as a key concern by the unified commanders.

Marine Corps inventories of prepositioned stock on ships and at overseas locations have also increased, but some shortages remain. The Army also shows some significant shortfalls in preposition stocks.

Sealift and airlift capability, while improved, are still areas of concern. For example, the Air Force currently has the capability to lift approximately 46.4 million ton miles per day, compared to its goal of 66 million ton miles. However, the Air Force goal is significantly less than what major wartime scenarios require. Again, this is an area of key concern to the unified commanders.

In summary, I believe that DOD's key gains have been in improving the overall quality of our military personnel and improving overall force readiness and adding new and more capable systems to its forces. Sustainability has also improved, but to a lesser extent.

However, maintaining these gains, continuing force modernization, addressing such deficiencies as sustainability and Reserve component capability, and achieving full capability performance from certain weapon systems, will require difficult choices by DOD in view of the current budget constraints.

Let me now discuss the reductions DOD has made and will have to make to bring planned spending in line with fiscal reality and the impact of these reductions on future defense capability.

Since the mid-1980s, DOD's 5-year defense planning has been fiscally unrealistic. More weapons were being planned and developed than could be produced in an economic manner or supported once they were produced.

Such unrealistic planning provides an unclear picture of defense priorities because tough decisions and tradeoffs are not made in the plan. Everybody gets what they want. Program decisions end up being made on a piecemeal basis to meet each year's funding realities.

This has led to program funding instability, costly stretchouts, and program terminations. This is not an effective way for DOD to manage, nor does it facilitate congressional oversight of the defense budget. I am encouraged by Secretary of Defense Cheney's recent testimony recognizing the need to instill more realism and stability into DOD's planning and budgeting process.

Now, chart 1, over here on my right and your left, shows the gaps between DOD's 5-year defense spending plans, the FYDP, and funding for those 5-year periods beginning in 1982.

For other people that cannot see the charts, these charts are in the back of the testimony.

Chairman NUNN. Tell us what each line is, if you could. Frank, maybe you could point it out so we would have a clear understanding.

Mr. BOWSHER. Yes. The dotted line there is the FYDP projection. The projections were made when each FYDP was put together. You can see the first FYDP was 1980 to 1984. The next one was 1981 to 1985, 1982 to 1986, and, of course, we have reached a peak of planned spending there in the 1986 FYDP.

Then the next line is made up of two things really. It is the budget authority that the Defense Department actually received. That is the dotted line up to where his finger is right now. Then, from that point on, it is the estimated budget authority, which is using the administration's inflation and planned real growth assumptions. This is represented by the solid line.

So, what you can see here is a major buildup here in expectations which then had to come down.

Chairman NUNN. Where are we right now on that?

Mr. BOWSHER. Well, that really takes us over here to chart 2, because what chart 2 will show you is the same type of buildup, but you will see at the end that the FYDP and budget authority line do not come down to meet. That is where we are about $150 billion short. I will explain in just a few minutes how we come to that $150 billion. So, that is where we are right now, that chart there.

Chairman NUNN. Now, that is after the budget submission by the Bush administration?

Mr. BOWSHER. Yes, that is correct.

Chairman NUNN. And that is comparing the supplemental budget request or amendment to the current Five-Year Defense Program?

Mr. BOWSHER. That is correct.

Chairman NUNN. How current is that Five-Year Defense Program? When was it submitted?

Mr. BOWSHER. When was it submitted?

Mr. CONAHAN. It was submitted in January—January 19, I believe.

Chairman NUNN. All right. Does that Five-Year Defense Program take into account the changes that have come from the budget amendment submitted by the Secretary of Defense?

Mr. CONAHAN. Yes, sir, it does.

Mr. BOWSHER. Yes. We factored them out.

Chairman NUNN. How could that be, when he did not submit it until——

Mr. CONAHAN. No, not the Five-Year Defense Program. No, sir, it does not include that. We are looking forward to a new Five-Year Defense Program which would take into account the $64 billion taken out be Secretary Cheney.

Mr. BOWSHER. Yes. But our people have deducted some of the amount. So we still think it is about $150 billion after the Cheney reductions.

Mr. CONAHAN. Correct.

Chairman NUNN. Well, that is what I am trying to get at.

Mr. BOWSHER. Yes. Yes.

Chairman NUNN. You mean, after the Cheney reductions——

Mr. BOWSHER. Yes.

Chairman **Nunn** [continuing]. You still believe that the Five-Year Defense Program is about $150 billion above the true realistic budget?

Mr. **Bowsher**. That is correct.

Chairman **Nunn**. What assumptions did you make regarding the——

Mr. **Bowsher**. If I could read the reasons, I think it would clarify it.

Chairman **Nunn**. All right.

Mr. **Bowsher**. This starts on page 13—because I really discuss the two charts here.

What you have here is three main areas. That is, the planned FYDP reductions currently contain amounts that exceed the President's budget by $45 billion. Now, that is really two categories.

DOD states that $21.7 billion represents procurement account reduction it intends to make in future years. So, in other words, they make an adjustment there and say we will make those in future years.

The FYDP also includes $23.3 billion in an unanticipated requirements account which is not attached to any specific program. This appears to be a planning reserve that is not reflected in the President's budget.

So, those are built into the thing. When you take them out, then you are going to have a $45 billion problem there. What you have done is you have taken out the flexibility, which we all know you have to have in the defense program.

Now, the second amount is the inflation shortfall. That is where the 5-year plan is based on inflation rates, starting with 3.6 percent in 1990, declining to 1.7 percent in 1994. Very optimistic. What we did to calculate the adjustment was to take the CBO estimate, which is in the ballpark with the other economic forecasting groups, and say that if you had that kind of inflation, then you would probably have another $48 billion.

Chairman **Nunn**. Is this inflation rate by DOD in the Five-Year Defense Program the same inflation rate OMB is using in other agencies?

Mr. **Bowsher**. Yes, it is.

Chairman **Nunn**. So, it is not just the Department of Defense, it is the whole inflation rate assumption by OMB?

Mr. **Bowsher**. That is right. If you remember, they had in the President's budget submission, inflation rates going down, interest rates going down and the growth going up. DOD's current inflation figures are tied to those rates.

Chairman **Nunn**. Did the budget resolution that the Senate passed contain the same inflation assumption?

Mr. **Bowsher**. I believe it did, Mr. Chairman. Yes. I believe that was part of the agreement there.

Chairman **Nunn**. Senator Thurmond.

Senator **Thurmond**. Mr. Chairman, I have an appointment I cannot change. I just want to welcome Mr. Bowsher here today. I have always been proud to have had a part in selecting him to fill this position. I think he has done a fine job.

I am going to ask that my statement appear in the record.

Chairman **Nunn**. Without objection.

[The prepared statement of Senator Strom Thurmond follows:]

Prepared Statement by Senator Strom Thurmond

Mr. Chairman: I want to join you in welcoming the Comptroller General, Mr. Bowsher. His statement on the review of our military capability achievements since 1980 is thought provoking and presents a challenge to this committee and the Defense Department. My perception of Mr. Bowsher's statement is that our forces are better prepared, but we did not get all that we thought we were getting.

Mr. Bowsher, I was particularly pleased to read your comments on the need for more stability in the budgeting process. This committee and its chairman have emphasized this point repeatedly. We cannot expect the Defense Department to do a credible job on the budget when the bottom line changes every year and in the case of this year's budget twice in a year.

Mr. Chairman, you have been and continue to be an ardent advocate of the 2-year budget. I want to applaud your efforts and let you know you have my support in this endeavor.

Thank you Mr. Chairman.

Senator Thurmond. Also, I have some questions of Mr. Bowsher. That I ask him to answer for the record. I would appreciate it.

Chairman Nunn. We would be pleased to do that, Senator.

Senator Thurmond. Thank you very much.

Chairman Nunn. Thank you, Senator Thurmond.

Mr. Bowsher. Thank you, Senator Thurmond.

Chairman Nunn. Go ahead, Mr. Bowsher. I am just trying to get clarification on these assumptions.

Mr. Bowsher. The third one is on the top of page 14 there where we are stating that if the congressional budget decisions result in additional reductions, it could be on the fact that the funding level here for the FYDP is based on certain assumptions. Namely, that the inflation plus 1 percent in 1991 would be the level, and then another 1 percent in 1992, and then 2 percent for both 1993 and 1994. These increases are calculated from the fiscal year 1990 base of $299 billion, not the reduced budget summit level of $295.

So, should Congress decide that they cannot fund these inflation increases, where you would end up then with no real growth in the budget summit base, then you would have an additional $54 billion in reductions that might be necessary in the period of 1990 through 1994.

Chairman Nunn. So, if you go to no real growth from the base budget submission, and you take the $150 billion approximate shortfall that you are already talking about, that is already there today with the President's budget and his assumed growth rates—that is $150 billion, assuming that he gets what he asks for over 5 years in defense, right?

Mr. Bowsher. No. The $150 billion is made up of these three components, Mr. Chairman.

Chairman Nunn. I understand that. But what I am asking is, your shortfall is assuming that the President gets the growth figure per year in defense that he now asks for.

Mr. Bowsher. No. I do not think that is right. In other words, the way to put it is, if he gets his growth that he has asked for now, then you do not have this $50 billion of the $150 billion shortfall.

Chairman Nunn. Okay. The last $54 billion.

Mr. Bowsher. Yes.

Chairman Nunn. That $54 is a part of the $150 then?

Mr. **Bowsher**. That is right. Yes.

Chairman **Nunn**. So, it is $100 billion if the President gets what he asks for.

Mr. **Bowsher**. Yes, that is a good way to put it.

Chairman **Nunn**. Another $54 billion if he does not get what he asks for, and if he gets zero percent real growth rather than what he is projecting.

Mr. **Bowsher**. That is right. Yes, sir.

Chairman **Nunn**. Okay. I got you.

Mr. **Bowsher**. Okay. So I will just read these last couple of pages.

The reductions DOD has made in its planned spending are substantial and will certainly slow planned improvements in defense capability. Since FYDP reductions to date were primarily in planned funding growth, the impact on our current capability may not be as much as it might appear when looking at the numbers.

In other words, it does not appear that these cuts have significantly reduced our current overall capability.

The force structure remains relatively stable although there have been or will be some personnel reductions and some older aircraft and ships retired earlier then planned. However, a number of new and more capable weapons that began development earlier in the buildup will be entering the inventory. Despite some reductions and stretchouts, most major procurements remain at or above the levels in the 1988 FYDP.

A look at other indicators of capability show that some areas will be adversely affected by the funding reductions, such as depot maintenance and spare parts inventories. But overall DOD has been able to protect gains achieved since 1980.

For example, current training activity will not be significantly impacted. Total Air Force flying hours will decrease as a result of older aircraft being retired, but flying hours per crew will remain approximately the same.

The inventory levels of munitions will remain approximately the same. In some areas, such as Navy torpedoes and surface-to-air missiles, the inventories will increase. Navy flying hours and steaming days have been protected. Army ground operating tempo is sustained at about 95 percent of the fiscal year 1989 level.

Now, historically, when faced with budget reduction decisions, DOD has looked to the readiness and sustainability funding accounts for a disproportionate share of reductions. We will be reviewing DOD's spending plans to determine if this continues to be the practice.

The impact of the previously mentioned FYDP reductions resulting from higher inflation, congressional funding reductions, and planned DOD reductions, are shown on chart 2, which we have already talked about. That chart shows a potential plan and reality gap of $150 billion over the next 4 years.

Even this figure assumes that the weapon systems currently in the procurement pipeline will be delivered on schedule and at planned cost.

I think that is a very important sentence there, Mr. Chairman, because what that says is that we do not have anything in here for cost overruns, or anything that would disturb, you might say, the unfolding of the plan. That would then increase the gap, if we have any cost overruns, or problems like that.

Chairman **Nunn**. Cost overruns measured from what base? Because we all know that the per-unit cost is going up on every stretch system. So, are your cost overruns based on current plans or are they based on current plans as adjusted by the Cheney reductions?

Mr. **Conahan**. In those places where he made reductions for stretchouts, these numbers are adjusted. So, they are giving——

Chairman **Nunn**. Yes.

Mr. **Conahan**. But where he did not make those adjustments, they are still to come.

Mr. **Bowsher**. Yes. Right. In other words, the 1-year adjustment on the B-2 is reflected. But if there was further slippage or further problems with the B-2, that would not be in these figures.

Chairman **Nunn**. Last year you came in and predicted we were going to have a major problem with cost overruns over the next 2, 3, or 4 years. You are not backing off that prediction?

Mr. **Bowsher**. No. I still think that is a real potential problem, and even more so as we get into these tighter fiscal budget years.

Chairman **Nunn**. But you are not basing that pessimistic assumption here?

Mr. **Bowsher**. No, we are not.

Chairman **Nunn**. If your assumption on cost overruns is true, or proved to be accurate, then we have a much bigger problem here than we are talking about.

Mr. **Bowsher**. That would be correct, Mr. Chairman.

Chairman **Nunn**. Do you have any idea about the magnitude of what you believe the cost overruns are going to be?

Mr. **Bowsher**. No. We know that the Navy shipbuilding ones are—what? About 19?

Mr. **Conahan**. Well, on the 60-ship contracts out there now, $2.6 billion in overruns.

Chairman **Nunn**. That is just the Navy, correct?

Mr. **Conahan**. That is just Navy ships right now.

Chairman **Nunn**. Okay.

Mr. **Bowsher**. Okay. Let me just finish these last two. To close this gap will require difficult decisions and tradeoffs among the broad areas where gains have been made, such as, one, maintaining or reducing force structure in terms of people and equipment, two, maintaining or reducing the pace of modernization in terms of cancelling new systems or stretching out procurement of others, or, three, reducing current levels of readiness and sustainability.

Closing the gap will likely have a greater impact on current capability than reductions made to date.

In closing, I want to mention two things that are needed to help DOD better plan its budget. First is the need for greater stability in defense budgets, and the second is the need for national security policy and strategy that can help guide priorities within fiscal constraints.

The Bush administration is currently undertaking a national security policy review which I am hopeful will serve as a guide for building future defense funding requests.

This concludes our prepared statement, Mr. Chairman. We would be pleased to answer any questions.

[The statement of Mr. Bowsher follows:]

Statement of
Charles A. Bowsher, Comptroller General
of the United States

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to testify today on our review of military capability achievements since 1980, current capability deficiencies, and the reality of defense planning.

In our view, one of the greatest challenges facing DOD today is to manage reduced spending after the largest peacetime defense buildup in our nation's history. DOD's budget more than doubled from 1980 to 1985. Since 1986 DOD's budget has been reduced somewhat--but at $290 billion it remains 36 percent higher today--in real terms--than in fiscal year 1980. Overall $2.4 trillion in funding has been provided since 1980.

The increases in defense spending have clearly resulted in gains in overall military capability, however, these gains were not as great as they could have been for the money spent. Gains were made largely by improving overall personnel quality and force readiness, while adding newer equipment to a slightly increased force structure.

DOD's five year spending plans contained programming to further improve defense capability and achieve defense build-up goals such as a 600 ship Navy and 40 wing Air Force. However, these plans assumed funding levels would increase substantially from the 1985 levels. In actuality these plans proved unrealistic and unaffordable in light of the mounting federal deficit. This left DOD with the task of reducing hundreds of billions of dollars in planned spending.

The fiscal year 1988 and 1990 five year spending plans have been reduced by $311 billion. This was achieved, in part, by terminating, reducing, delaying and stretching out weapons procurements; retiring some older systems earlier than planned; and through procurement reductions in spare and repair parts, support equipment, and facilities. These reductions required DOD to make force structure changes and reduce maintenance and support goals. However, it is important to keep in mind that these reductions are primarily in planned funding growth. It appears the reductions were made without significantly deteriorating current capability.

I recognize the difficulty of the decisions and tradeoffs the new administration and defense secretary have already made to reduce planned spending, however, I am concerned that further FYDP reductions of about $150 billion will be required if current projected funding growth, inflation and other assumptions are not realized.

Reductions of this size will pose even more difficult choices for DOD and the Congress. However, before such reductions are made, the mismatch between resources and national security policy and commitments must be addressed. Linking funding priorities to these strategies within fiscal constraints is the key to achieving realistic planning and stable budget levels. The Administration's current national security policy review is a step in that direction.

Let me now address, in general terms, military capability achievements and current deficiencies

FORCE STRUCTURE AND MODERNIZATION

Between 1980 and 1989, investment funding totaled more than $1.2 trillion or 43 percent of total DOD funding. These funds went largely to the goal of developing and procuring weapon systems and equipment to modernize DOD's force structure. Overall, I see some important gains. However, certain changes in the force mix do raise capability questions. Also, I have significant reservations about the management of certain weapon system programs that lead me to believe we could have gotten more for our money. Specifically some of my major observations on changes to force structure since 1980 are:

-- Army divisions increased from 24 to 28. The increase in the number of divisions was accomplished while overall personnel strength decreased by about 5,000 personnel. Consequently, active Army divisions have fewer personnel today than in 1980. On the other hand, reserve forces increased by about 196,000 personnel and are more heavily relied on today to meet wartime contingency plans. However, while improved since 1980 the low readiness of the Army reserve raises concern regarding the ability of these forces to augment and support active forces in the event of a major conflict. Of particular concern are the capabilities of combat service support units.

The Army added large numbers of more capable weapon systems and equipment such as 5,496 M-1 tanks, 5,076 M-60A3 tanks and 3,180 Bradley fighting vehicles to replace older and obsolete systems and equipment. However, the acquisition programs also experienced difficulties. For example the Army, after spending over $2 billion terminated the Division Air Defense Gun program and is still working to develop a new Forward Area Air Defense System. The Aquila (a remotely piloted vehicle) program was also terminated after experiencing developmental problems and at a cost of over $800 million. A number of other systems also experienced either delays, technical difficulties or increased program costs.

-- The Navy made considerable progress towards achieving its goal of 600 ships, increasing from 479 deployable battle force ships in 1980 to a projected 1989 figure of 568. The increased number of ships enabled the Navy to expand from 13 to 14 carrier battle groups, as well as to add 4 battleship surface action groups. The addition of 32 Los Angeles Class 688 attack submarines added to its antisubmarine warfare capability, 10 new Trident submarines improved its strategic capability and 13 AEGIS cruisers added to its air defense capabilities. To support this increased force structure the Navy experienced the largest increase in active duty personnel among the services, adding about 66,000 personnel since 1980.

During the same period the inventory of Navy aircraft remained at about the same levels. Concerns were raised by your Committee last year as to whether the procurement rate for Naval aircraft is sufficient to adequately support projected carrier battle group force structure and prevent further deterioration of the average age of Navy combat aircraft.

Also, we have previously reported that the Navy's force structure is not comprised of the right mix of ships. Specifically, the Navy has a shortfall of anti-air warfare cruisers and destroyers needed to protect its carrier battle groups. The Navy continues to have a shortage of fast sealift capability to support major contingencies. Additionally, the Navy's force modernization program did not always progress smoothly. For example, we recently reported on operational testing problems with the MK-48 ADCAP and MK-50 torpedo programs. Our prior work also raised questions about the capabilities of the AN/BSY-1, Combat Control and Acoustic Subsystem for attack submarines.

-- The Air Force currently has 35 equivalent tactical fighter wings consisting of 72 aircraft each, compared to 31 wings in 1981. There are about 13,000 more active personnel today than in 1980. However, this is 31,000 less than in 1985. While the inventory of tactical aircraft did not increase significantly, it is now comprised of more modern aircraft such as the F-16 and F-15. Major changes affecting strategic air forces were the deployment of the Peacekeeper missile, B1-B aircraft and air launched cruise missiles and increases in the number of nuclear warheads. Airlift capability was increased with the addition of 44 C-5B aircraft to the force structure. However, significant capacity shortfalls still exist.

The Air Force also had problems developing and deploying weapons that met planned capability improvements. For example, the Air Force is experiencing significant technical problems in developing a penetrating bomber. The B-1 bomber is experiencing significant technical problems that are affecting performance capabilities, while the B-2 bomber has been reported to have technical problems and schedule slippage. In addition, we recently reported that the Peacekeeper flight testing programs are more than 2 years behind their original schedules and as a result the Air Force has not yet begun its operational test and evaluation program, which is designed to confirm that the deployed Peacekeeper will work in its intended environment.

-- The Marine Corps force structure is the same today as it was in 1980. It has 3 active and 1 reserve divisions and wings. The Marine Corp's active end strength increased by about 8,700 personnel during the period, and the reserve force increased by about 7,900 personnel. Equipment inventory levels remained approximately the same. However, the Marine Corps has replaced older systems with more capable ones such as the F/A-18, and AV-8B and the 155 mm howitzer.

READINESS

Overall the key indicators of military readiness show marked improvement. However, a few areas such as reserve component readiness indicators and depot level maintenance backlogs do provide reasons for concern. Specifically my observations on readiness are:

-- Indicators of unit readiness generally show a continued high overall status in recent years. The greatest gains were in combat support and combat service support units however, they generally lagged behind combat units. This reflects the higher priority DOD places on resourcing its combat units. Further, reserve components, while showing improvement, lag behind the active components in all areas except for certain Naval and Air Force reserve units. As I previously mentioned Army reserve component capabilities are an area of concern.

-- Increased personnel quality has been frequently cited by DOD as one of its significant accomplishments and based on everything I see this seems to be the case. Indicators of personnel quality such as test scores on the Armed Forces Qualification Test, high school graduate accessions and experience of the force are significantly improved. For example, high school graduates represented 68 percent of DOD's accessions in fiscal year 1980 and 93 percent in fiscal year 1988.

-- Indicators of training activity such as flying hours per crew per month, steaming days for ships and tank training miles show that levels of training varied. However, the status of personnel training within active component units was at generally high levels.

-- Indicators of materiel readiness such as shipboard inventory supply responsiveness, mission capability rates, and cannibalization of aircraft spare parts showed general improvement. For example, Navy and Air Force mission capable rates showed the greatest improvement. However, depot maintenance backlogs are increasing in all services. In the Air Force, for example, backlogs as a percentage of funding are slightly greater than 1980 levels.

I also feel it is important to mention at this point that we have reported numerous instances of inefficient supply support practices and the procurement of significant quantities of unrequired items. For example, we have reported that inventories of unrequired stocks grew from $10.1 billion in 1980 to $28.9 billion in 1987.

SUSTAINABILITY

Overall, the sustainability picture is improved in a number of areas since 1980. However, some significant shortfalls still exist. For example:

-- Shortages exist in preferred munitions, such as: air-to-air, and air-to-ground missiles in the Air Force and Navy and surface-to-air munitions in the Army. It is important to note that these shortages have been identified as a key concern by the Unified Commanders.

-- Marine Corps inventories of prepositioned stocks on ships and at overseas locations have also increased, but some shortages remain. The Army also shows some significant shortfalls in prepositioned stocks.

-- Sealift and airlift capability, while improved, are still areas of concern. For example, the Air Force currently has the capability to lift approximately 46.4 million ton miles per day compared to its goal of 66 million ton miles. However, the Air Force goal is significantly less than what major war time scenarios require. Again this is an area of key concern to unified commanders.

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In summary, I believe DOD's key gains have been in improving the overall quality of our military personnel and improving overall force readiness and adding new and more capable systems to its force. Sustainability has also improved but to a lesser extent. However, maintaining these gains, continuing force modernization, addressing such deficiencies as sustainability and reserve component capability, and achieving full capability-performance from certain weapon systems will require difficult choices by DOD in view of current budget constraints.

Let me now discuss the reductions DOD has made and will have to make to bring planned spending in line with fiscal reality and the impact of these reductions on future defense capability.

PLANNING/REALITY MISMATCH

Since the mid 1980's DOD's five year defense planning has been fiscally unrealistic. More weapons were being planned and developed than could be produced in an economic manner or supported once they were produced. Such unrealistic planning provides an unclear picture of defense priorities because tough decisions and tradeoffs are not made in the plan--everybody gets what they want. Program decisions end up being made on a piecemeal basis to meet each year's funding realities. This has lead to program funding instability, costly stretchouts, and program terminations. This is not an effective way for DOD to manage nor does it facilitate congressional oversight of the defense budget. I am encouraged by Secretary of Defense Cheney's recent testimony recognizing the need to instill more realism and stability into DOD's planning and budgeting process.

Chart #1 shows the gaps between DOD's five year defense spending plans (FYDP) and funding for those five year periods beginning in 1982. Since that time FYDP planning has exceeded actual and current estimated funding by over $2 trillion. The top line on the chart shows the total for the FYDP submitted annually. For example, in 1986 the five year spending plan for 1986-1990 totaled $1.9 trillion. This was $555 billion more than was ultimately funded assuming the fiscal year 1990 request is approved as submitted. The bottom line shows the total budget authority for the five year periods. As you can see, DOD has substantially reduced its planned spending. We do not know exactly how the earlier reductions were achieved because we did not have access to the FYDP's prior to fiscal year 1988. However, we do know that DOD has delayed key force expansion plans such as the 600 ship Navy and 40 Air Force tactical fighter wings.

Our analysis of the 1988 and 1990 FYDPs shows that DOD reduced its planned spending by $311 billion for fiscal years 1988-94. This includes the recent reductions made by Secretary of Defense Cheney. Over half of the FYDP reductions were in the procurement and research and development accounts. Procurement reductions were in support equipment and facilities, spare and repair parts, ammunition, other procurements and major weapons systems. A number of major weapons systems procurements were reduced, delayed, or stretched out and some were terminated. Major programs terminated include the V-22 Osprey, A-6 aircraft upgrade, and new F-14D aircraft; quantity reductions include the AV-8B aircraft, F-15D/E aircraft and the SSN-688 submarine; stretchouts include the F-16 aircraft, the Advanced Cruise Missile, Tomahawk missile, and Mark 48 torpedo; and delays include the B-2 bomber, and the T-45 aircraft.

DOD's 1990 FYDP included $33 billion in non-programmatic reductions from its undistributed contingencies account. This included the elimination of $19.6 billion in undefined initiatives that appears to be some type of management reserve. Another $11.5 billion was reduced from projected civilian and military pay raises.

MORE REDUCTIONS MAY BE REQUIRED

The 1990-1994 FYDP may need to be further reduced for the following reasons:

Planned FYDP Reductions: The 1990-94 FYDP currently contains amounts that exceed the President's budget by $45 billion. DOD states that $21.7 billion represents procurement account reductions it intends to make in future years. The FYDP also includes $23.3 billion in an unanticipated requirements account which is not attached to any specific program. This appears to be a planning reserve that is not reflected in the President's budget.

Inflation Shortfall: The five year plan assumes an inflation rate of 3.6 percent in 1990 which declines steadily to 1.7 percent in 1994. The Congressional Budget Office (CBO) and other economic forecasting groups estimate inflation rates in excess of 4 percent for each of the five years. Using CBO's projections the five year plan is under funded by nearly $48 billion.

Planned Funding Increases Questionable: Congressional budget decisions may result in additional reductions. As stated earlier, the current five year plan assumes funding will grow to cover inflation plus 1 percent in 1991 and an additional 1 percent in 1992 and 2 percent in both 1993 and 1994. The increases are calculated from the fiscal year 1990 base of $299.3 billion, not the reduced budget summit level of $295.6 billion. Should Congress decide to fund only inflation increases with no real growth from the budget summit base, an additional $54 billion in reductions will be required over the 1991-94 period.

IMPACT OF PLANNED SPENDING REDUCTIONS

The reductions DOD has made in its planned spending are substantial and will certainly slow planned improvements in defense capability. Since FYDP reductions to date were primarily in planned funding growth, the impact on our current capability may not be as much as it might appear when looking at the numbers. In other words, it does not appear that these cuts have significantly reduced our current overall capability.

The force structure remains relatively stable although there have been or will be some personnel reductions and some older aircraft and ships retired earlier than planned. However, a number of new and more capable weapons that began development earlier in the build-up will be entering the inventory. Despite some reductions and stretchouts, most major procurements remain at or above levels in the 1988 FYDP.

A look at other indicators of capability show that some areas will be adversely affected by the funding reductions--such as depot maintenance and spare parts inventories--but overall DOD has been able to protect gains achieved since 1980. For example, current training activity will not be significantly impacted. Total Air

Force flying hours will decrease as a result of older aircraft being retired, but flying hours per crew will remain approximately the same. Inventory levels of munitions will remain approximately the same. In some areas, such as Navy torpedoes and surface-to-air missiles, the inventories will increase. Navy flying hours and steaming days have been protected. Army ground operating tempo is sustained at about 95 percent of the fiscal year 1989 level.

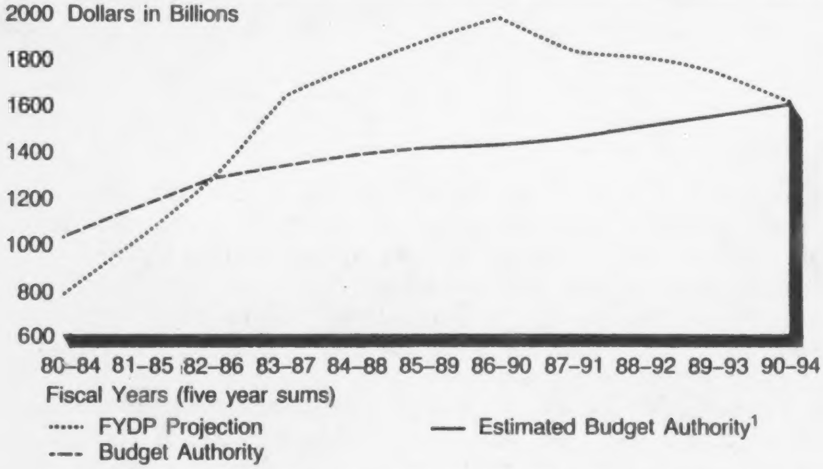
Historically, when faced with budget reduction decisions, DOD has looked to the readiness and sustainability funding accounts for a disproportionate share of the reductions. We will be reviewing DOD's spending plans to determine if this continues to be the practice.

The impact of the previously mentioned FYDP reductions resulting from higher inflation, Congressional funding reductions, and planned DOD reductions are shown on chart #2. The chart shows a potential planning/reality gap of $147 billion over the next four years. Even this figure assumes that weapons systems currently in the procurement pipeline will be delivered on schedule and at planned cost. To close this gap will require difficult decisions and trade offs among the broad areas where gains have been made such as (1) maintaining or reducing force structure in terms of people and equipment (2) maintaining or reducing the pace of modernization in terms of cancelling new systems or stretching out procurement of others, or (3) reducing current levels of readiness and sustainability. Closing the gap will likely have a greater impact on current capability than reductions made to date.

In closing I want to mention two things that are needed to help DOD better plan its budgets. First is the need for greater stability in defense budgets and second is the need for national security policy and strategy that can help guide priorities within fiscal constraints. The Bush Administration is currently undertaking a national security policy review which I am hopeful will serve as a guide for building future defense funding requests.

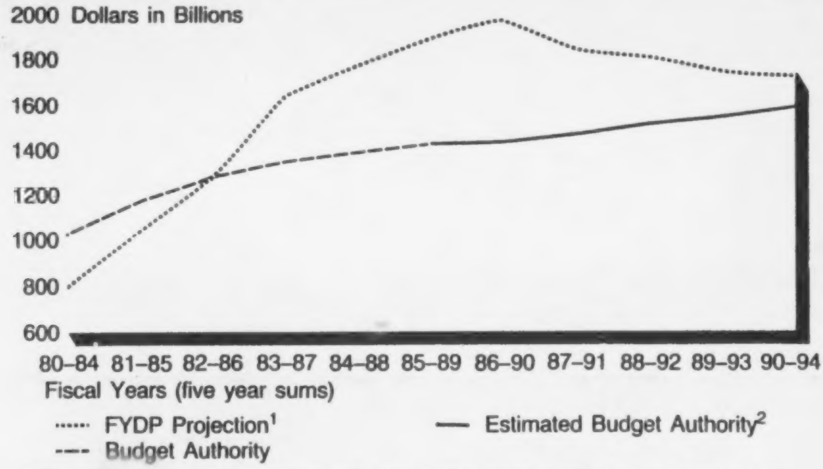
That concludes my remarks for today--I will be glad to respond to any questions the Committee may have.

GAO DoD Projections



[1] Budget authority for fiscal years 1990 through 1994 is estimated using the Administration's inflation and planned real growth assumptions.

GAO Additional Reductions Required



[1] DOD's FY 1990-1994 planning figure is adjusted upwards by $93 billion. This reflects $45 billion in program reductions necessary, but not yet made, to meet the Administrations latest fiscal guidance and CBO inflation assumptions which add $48 billion.

[2] DOD's budget authority estimate is lowered by $54 billion. This assumes Congress will grant full inflation funding but no real growth for fiscal years 1991 through 1994.

Chairman NUNN. Thank you very much, Mr. Bowsher.

With this kind of wedge here—and I understand that total wedge from 1981 to 1994 is what? Is that the $2 trillion figure?

Mr. BOWSHER. Yes, that is right.

Chairman NUNN. $2 trillion. That means that over that timeframe there were excessive expectations of about $2 trillion?

Mr. BOWSHER. That is correct.

Chairman NUNN. Now, that is a huge amount of money, by anybody's count. Yet, we have been able to reduce that down very, very substantially and still not have a dramatic—although I certainly believe it has had an effect—without having a dramatic impact on current military capability.

So, the impact evidently comes between what we have now and what we would have had had we increased the amount by that much. Is that where you measure this?

Mr. BOWSHER. That is right, Mr. Chairman.

Chairman NUNN. What is the effect of being that much off on the Five-Year Defense Program? $2 trillion off on a Five-Year Defense Program, does that mean the Five-Year Defense Program has been essentially worthless?

Mr. BOWSHER. Well, it might be close to that because actually——

Chairman NUNN. What is a word close to worthless that is not quite that? [Laughter.]

Mr. BOWSHER. I sometimes hate to use such extreme words. But there is no question that when you get that far off with your planning it is very hard to be making the decisions that will keep you, as you might say, in good sequence as you move along.

In other words, right now you are having to make decisions like cutting some of the programs for the Navy air, which are pretty dramatic. Whether all of those cuts would have to have been made if we had had a better planning process, let us say, through the 1980s, I think is a good question.

I think the same thing even when we look at base closures now. We are looking at bases that had some modernization put into them less than 5 and 6 years ago, spending millions of taxpayers' dollars and now we are going to close some of those bases down. We probably will close more bases, I would guess, in these constrained years, and we will certainly be looking at some of the overseas bases.

So, again, we have been putting money into those kinds of situations that we probably are not going to get a lot of money out of.

It also comes down to, of course, the economic buys that you make. If you can have a more level production of your weapon systems over a number of years, you generally buy more, say, at the end of a 10-year period than what you would do if you have this peak and valley. If you have peaks and valleys plus unrealistic planning, I think then you run into more difficulty.

Chairman NUNN. Well, just separating out the unrealistic planning, if you had to describe—not in terms of dollars, but just in terms of what that has cost us, how would you describe the cost to the national security capabilities because of unrealistic planning, which is rather evident from the chart?

Mr. BOWSHER. Well, one thing I asked my people to do was to show me what were in the earlier FYDPs, the FYDPs that had the big numbers, say, versus the 1990—let me, if I could, just run down some of those numbers. Like in the strategic area, the bombers were planned for 387 and now we are down to 358. So, that is down 29. Tankers are down 21. Submarines are down 5. Aircraft, 18. In the tactical area you have two less submarines.

But now are the big numbers. When you look at the fighter attack aircraft in the Air Force, instead of getting 3,033 we are getting 2,820. So, you are down 213. The Navy is down 115; Marines are down 491.

So, you do not know how much of that you could have afforded, but you can see the numbers are dramatically different.

Chairman NUNN. What I am trying to get at, I guess—and then this will be my last question, I will defer to Senator Warner, but we would have had reduced numbers even if we had had realistic planning.

Mr. BOWSHER. Yes.

Chairman NUNN. Most of those numbers would not have been there if 5 years ago, or 7 years ago, we would have known what we were going to spend—we would not have projected that many numbers.

But what we have done is projected way up here, and have gotten to this level. What I am trying to gauge is, is there a cost for that kind of unrealistic planning? Do we pay a penalty, or is that a free ride?

Mr. **Bowsher**. I do not think it is a free ride at all. It is hard to quantify, but I think when you go into the stretchouts, as you are now having to do like on some of the programs, and you look at how the unit costs pop up on you versus what you had hoped to buy, that starts to give you some indication, I think, of what you are losing literally by not having a more level planning and budgeting program here.

Chairman **Nunn**. I guess what I am asking is would we have had a number of weapons systems we never would have started—if we had had both of those lines relatively close together starting in the 1982 timeframe, if those lines had been relatively close together, obviously we would have still had a lot less money.

Mr. **Bowsher**. Yes.

Chairman **Nunn**. Two trillion dollars less money than that top line is. But what would we have gotten for it if we had done realistic planning?

What I am really asking, is the planning process meaningful? Because if you are this far out of whack and there is not a penalty to it, then it seems to me you could pretty much make a case that the 5-year planning process itself does not have any meaning.

Mr. **Bowsher**. Well, it seems to me that when you look at the stretchouts and then the other things that you just raised, Mr. Chairman, that is, did we start some weapons systems that we would not have started and maybe then would have to cancel some of those—because I think some of the tough decision-making is still ahead of us here in the next couple of years—why, that is when you do see what the real cost is of the lack of a good planning system.

So, I think that one of the unfortunate things about the defense area was that it has a basically good planning system over there and it just was not used properly in the last few years.

Chairman **Nunn**. Now, whose fault is that?

Mr. **Bowsher**. Well, I think the people that were in leadership positions at the Defense Department were the ones that seemed to have difficulty in trying to put together a Five-Year Defense Program that everybody could look at.

Chairman **Nunn**. Senator Warner.

Senator **Warner**. You and I have known each other a long time. I have never known you to indulge in such high drama as of today.

Let us take a look at one thing. You have characterized the $45 billion negative funding wedge as an example of poor management. My calculations indicate this $45 billion wedge is less than 3 percent of the total funding of the 5-year plan.

Mr. **Bowsher**. I do not think I characterized that as poor management. I was just saying that when you take that out, the chances are you might have a $45 billion gap there as the 5-year plan unfolds.

I think that what we were characterizing as poor management or poor planning was allowing the FYDP to get so far away from what the funding realities were.

Senator **Warner**. But that $45 billion assumption is about a 3-percent margin of error. Now, as a professional accountant, given the variables here, is that really such a bad job?

Mr. **Bowsher**. No. In fact, one of the things that worries me is that when the wedge is taken out, you might say, we are giving up the flexibility. In other words, I think that by literally assuming that unanticipated spending will not be needed, or will not be used, then the plan you are now looking at is too tight, and all probability that you will face those additional costs somewhere along the line.

Senator **Warner**. A lot of this stems from the irregular budgeting process itself. The chairman and I, and other members of this committee, have long advocated 2-year budgeting for DOD and we have had limited success to date. The most recent negotiations between the executive and legislative branches again produced a single-year budget agreement for fiscal year 1990.

Do you have any suggestions for us based on your considerable experience?

Mr. **Bowsher**. No. I think what you have been trying to do, this committee and the leadership of you, Senator Warner, and Senator Nunn, of trying to get an out-year plan that you could look at, and a 2-year budget, makes a lot of sense.

I think the only additional thing that I would possibly recommend is for the Secretary of Defense to use the technique—and I think I have made this point before—of fiscal guidance that Mel Laird used during our tenure over there, John, because I think that brings the military into the decision-making process in a good way, and that forces realistic planning. It forces realistic planning and realistic budgeting and it gets everybody into the process.

Senator **Warner**. Do you have reason to believe that the military have not been involved in the process in the last couple of years?

Mr. **Bowsher**. No. I think they have been in the process. But I think it is the old story. When you get that far out, it is kind of like during the last part of the MacNamara years when I remember we had budget requests up there for his review at $125 billion and everybody knew we were only going to get $80 billion. So then, you know, everybody starts making decisions here that eventually turned out to be uneconomical and, you know, you and I had to work with the cost overruns that resulted from that.

So, I see a pattern here in those middle 1980s, somewhat like we had at the end of the MacNamara era. Again, we had the same planning process. It was just the way it was being managed.

SHIPBUILDING COST OVERRUNS

Senator **Warner**. I heard you mention shipbuilding cost overruns. So what is new?

Mr. **Bowsher**. That is right.

Senator **Warner**. We have had that problem for a long time.

Mr. **Bowsher**. Yes.

Senator **Warner**. I was not able to be here for the first part of the hearing, but I judged that you were critical somewhat of the increases in defense spending that then will have not yielded as big a bang for the buck as we might have expected.

How would you have redirected some of those funding profiles during the Reagan era to achieve a bigger bang for the buck?

Mr. **Bowsher**. Well, I think the areas that start to take away or give you problems on the bigger bang for the buck is how much overhead are you buying, and I think one of the things that happened there was that we rebuilt a lot of the overhead that we had. We had streamlined down there in the first Nixon administration. I think unfortunately a lot of that got built back up here when the money was plentiful.

I think those tough decisions are ahead of us now. In other words, are you going to streamline the overhead. It seems to me the defense industry has already begun. You are going to have to streamline the overhead in the military forces themselves as you face the more realistic funding levels that you are going to have.

I think, again, the peak and valley type thing—I often use the illustration of when Frank and I were overseas. We asked the people how are you spending all of this money, in the early 1980s. They said, "Well, it is not easy, but we are just hiring everybody we can," and they described it to us. The more they described to us, the more they described a very inefficient process for getting the money out and getting it working in the MILCON area, and things like that.

I think the other thing is technology, John. In other words, the management of technology in these weapons is tough. There is no question about it. But when you look at bombers that are going to cost what the B-1 and the B-2 are costing, why, that squeezes out a lot of other programs. I think that, again, when you are doubling the budget—when you are looking at planning estimates like that, then people are not just as cost conscious as they probably should be in making some of those decisions.

Senator **Warner**. Let me get another question in, my good friend. Indeed, you have been and always will be.

MILITARY CAPABILITIES

You talked about capabilities in your statement. As I understand it you do not think we have had a significant degradation of our overall military capability as a consequence of the lowered defense budgets, lowered below the request of the Presidents.

But, as I listen to the Chairman of the Joint Chiefs of Staff, he has a different view. I guess my question is, do you recognize that you are of different opinions? You and the Chairman?

Mr. **Bowsher**. Well, I watched the tape and there is no question that there is some degradation, John. But when you look at the numbers here—and we tried to pull together the numbers and look at the force levels—you are not cutting the forces all that much. The training hours seem to be holding up there.

When you look at the dollar numbers, we are still 34 percent above—on a real constant dollar basis—where we were in 1980. So, it should not come as a surprise if, for this year, these cuts have not had that big of an impact.

I think if I sensed his concern, it was more a concern that if this is the beginning of a lot of cutting, then we are going to have some major cutbacks in capability. I would not be surprised that he might be right.

Senator **Warner**. I thank my good friend.

Thank you, Mr. Chairman.

Chairman NUNN. Thank you, Senator Warner.

Senator Exon.

Senator EXON. Mr. Chairman, thank you very much for coming today. We are very glad to have you here.

I salute you for coming out with your report and I will have a question or two on specifics on this in just a moment or two.

Your findings did not come as any surprise to me. About 2 years ago I wrote to then-Secretary of Defense Caspar Weinberger and told Cap that I was confident, after my study of the budget that I had made, that the next administration and the person that would succeed Weinberger as Secretary of Defense under a new administration would inherit a totally fiscally bankrupt national defense policy. It was obvious that we did not begin to have the billions of dollars that were necessary to meet the basic ongoing programs, let alone the black programs—many of which are quite promising that are coming on down the pike.

BLACK PROGRAMS

The deficits that you are predicting are pretty much in the ballpark and from where I have been coming from for a long time. It is as if we lived in a fantasy world. Do your projections also include black programs that you know about, or are your estimates based solely on the matters that are out in the open and are generally talked about?

Mr. CONAHAN. The gross numbers include black programs.

Senator EXON. They include black programs. I would like to ask you just a few more specifics in this general line.

We received this morning from the administration a directive that the Department of Defense provide this committee with a stretchout cost on a whole series of programs. That information was very late, about 4 months late, in coming here, but it did arrive this morning. I am sure that you have not seen it yet.

Mr. BOWSHER. No, we have not.

Senator EXON. I assume you have not. But just let me tell you, to give you a little background.

The AMRAAM stretchout, according to this report, will increase in cost by 9 percent. The KC–135R stretchout will increase in cost by 7 percent. The Hellfire missile cost will increase by 19 percent. The Mark–50 torpedo cost will increase 10 percent this year and 30 percent next year. Again, because of the stretchout. All together, there were 29 major weapons systems that meet the criteria for "stretchout impactment statement."

There was a second criteria in the statute that could figure as stretchout impact statement, and that criteria was a specified deviation from the baseline under which the procurement program was approved in the first place.

The stretchouts were so severe in this area that the Department did not even report on it.

Mr. Bowsher, I know GAO has not seen this report. But let me ask you for an on-the-record statement—to look at this report and give us your assessment of it. There is no question but what it is going to push your figures up substantially more than they are already now.

Do you have any offhand, off the top of the head estimates? You must have considered the fact that there would be some costs that you did not anticipate even in your report which you have already said you have not looked at these.

Do you have any guestimate, if you would, at this time on how much higher we could go? Could it be a third more than your estimate? Or, could it be 50 percent more?

Mr. BOWSHER. I would hesitate to give you a number, but I would be willing to say this. That it could be a good deal more.

In other words, once you start into this stretchout period on weapons systems, the costs escalate very fast on you. The percentages that you just read there, Senator, sound, if anything, low to me, based on my past experience in watching weapons systems that get stretched.

I also think that those numbers I am sure were put together with the assumption that this is probably the worst scenario. This is the FYDP we are going to see. But, if you have to deal with this $150 billion problem and then you have to deal with any problems that are bigger—and you and I have discussed from time to time about the Gramm-Rudman process—if you get forced down lower in defense, then the stretchouts are going to become very costly.

B-2 PROGRAM

Senator EXON. Could you tell me what is incorporated in your figures with regard to the B-2 program, which we all know is a very expensive program. Is that figured on a considerable stretchout in your figures?

Mr. BOWSHER. Well, we have sent the committee our latest estimate on the program and that, of course, is classified—that document that we sent. But our numbers here are based on the latest. Yes.

Senator EXON. General——

Mr. BOWSHER. But, see, I think that is a good example because I think in the B-2 program, if that stays in the development phase for additional years, then the dollars become very great.

Senator EXON. The subcommittee on strategic matters held a closed hearing today and we had General Chain, the Commander in Chief of SAC here. Afterwards, he stated publicly in front of reporters and the television cameras that he thought the American people should know and understand that as of today we are spending roughly 5 percent of our GNP on the defense of the United States of America. He said that is the lowest percentage of GNP, since the beginning of the Korean war.

Would you agree with his assessment?

Mr. BOWSHER. I do not remember the numbers offhand, but it has certainly been coming down. I think this is one of the frustrations that a lot of the military have. I know they have said so in some of the meetings that I have had with them. That is, when our defense program is a smaller percentage of GNP and a smaller percentage of the Federal Government, is why are we having such a difficult time?

One of the problems is the interest costs. In other words, the debt that we have built up, crowds out a lot of programs. You know, the interest cost right now is $180 billion and if you really put in some of the things such as the S&L corporation that you are putting——

Senator **Exon**. Off budget.

Mr. **Bowsher** [continuing]. Off budget. Yes. If you put in a thing like that, and if we have another year or two of large deficits and the interest rates stay up here, you are soon going to be about $200 billion of interest costs each year.

If you really think about it, one of the things that is crowding everybody out, whether they talk about health care or education or defense, is that the interest cost has to be paid first.

Senator **Exon**. Or I cut your program. Let us put it that way.

Mr. **Bowsher**. Yes, that is right. I have even used this illustration from time to time when I have talked with the military. I said you basically have a $400 billion defense program, but the first $100 billion today is now going to interest.

Senator **Exon**. In other words, what you are saying is that the percentage is masked by the fastest rising——

Mr. **Bowsher**. That is right.

Senator **Exon** [continuing]. Percent of the outlays of the Federal Government, which interest rates are going up rapidly and defense costs are going down but it is partially masked. Is that right?

Mr. **Bowsher**. I think that is right. I think our problem with the overall budget is being masked by the use of trust fund revenues and I think the debt is going up at a tremendous pace. So the interest cost is just getting huge, and that is crowding out military programs as well as domestic programs.

Senator **Exon**. Thank you, Mr. Bowsher. Thank you, Mr. Chairman. My time is up.

Chairman **Nunn**. Thank you, Senator Exon.

Senator Gorton.

Senator **Gorton**. Mr. Bowsher, you gave a rather casual answer to a question of Senator Warner's which I may have missed because of that, and it may have been of considerably more importance. Perhaps you can explain it to me without having had previous experience in this field.

It sounded to me like you said to Senator Warner that to have the top dotted line and the bottom black line be identical would not necessarily be a good thing because it would deprive us of flexibility and the ability to make needed changes from year to year.

Did I hear you correctly or not?

Mr. **Bowsher**. I do not think I said that. What I am really saying is that DOD had some flexibility in the FYDP, then they took that out.

What we are saying is that based on experience, lots of times you do have cost overruns, you do have operations like the Persian Gulf, and things like that. I thought it was good to have some kind of a flexibility in there.

What we are saying by that chart—and it is a little confusing, I grant that—is that you are probably going to have those kinds of costs facing you. So we just want to say that these costs could well be part of your costs in the future and that is why we put it back in.

Senator GORTON. Well rather than to say to have that dotted——

Senator WARNER. Would the Senator yield for a minute. But we are required by law to have an identical top line in the FYDP as in the budget request.

Mr. BOWSHER. Well, that was the way it has always worked before, John. But they had it in there and then they have taken it out. I am just saying that do not be surprised if the costs come back during the next 5 years.

Senator GORTON. So, in fact, not only is it not desirable to have the dotted line so far above the solid line there, if anything, it ought to be a little bit below it?

Mr. BOWSHER. That might be another way to put it. That is right.

Senator GORTON. Okay. I thank you for that clarification.

ESTIMATED BUDGET AUTHORITY

Let me ask you a question on another subject. I am looking now at the solid black line there, the estimated budget authority, which, as you pointed out, is based on what the President's recommendations of some modest real growth over the next few years are to be.

I think you and the rest of us recognize that, in fact, that solid black line is very unlikely to move upward, at least in the next few years. May be moving downward. Therefore, the gap is larger even than you have estimated it to be in all reality.

Yet, as we look at ways in which to reduce that gap, and assuming that we are not going to reduce it by pushing that black line upward by increasing budget authority, where, both from the point of view of the short-run and the medium-run—say, 5 years or so out—are we likely to get the greatest degree of response? We have concentrated, here, most of the questions have directed themselves at procurement and particularly at procurement of new systems.

You, I think, have perhaps properly criticized getting it out of what might, in the broadest sense be called readiness, but presumably that is the source.

The third are which I do not believe I have heard you discuss, at least in any detail, obviously would be the size of our armed services, the size of the active duty component. Now, how does each of those choices or some reasonable combination of them impact that top dotted line, and is any kind of mix in that connection a recommendation with respect to any mix in that combination any part of your job or your analysis?

Mr. BOWSHER. Yes, we have done studies on that. I think I would generally describe it this way. That is, you get your biggest savings by force level reductions. In other words, generally by bringing down the number of units, and the number of people. This is even more true today than it was, say, 20 years ago because of the high cost of military personnel.

Also we have the retirement costs now—which we should have had all along—built into the cost of our defense budget. So, I think the biggest potential savings are in the force level changes. The smaller forces, you might say.

Now, of course, we are in the midst of major negotiations with the Soviet Union and so I think that a lot of the decision-making on force level will probably have to wait until we see how those negotiations work out. But it seems to me that if you were to ask me what is the potential area for the biggest savings in the next 5 years or so, if negotiations were to go along the lines of some agreed-upon reductions, and if you do not bring those personnel back to the States and put them into camps here, but, say, put them into Reserve units, I think that is your biggest source of potential savings.

Senator Gorton. If I could interrupt. You say there are no savings or no substantial savings if——

Mr. Bowsher. If you just bring them back and put them in camps here. No, there are not great savings.

Senator Gorton. I understand that. But how about putting them in Reserve units?

Mr. Bowsher. In Reserve units there is big savings.

Senator Gorton. Okay.

Mr. Bowsher. Yes.

Senator Gorton. Go ahead.

Mr. Bowsher. Then I think the second big area of potential savings is becoming, I think, more efficient and having less overhead in your operating appropriations and costs. That means the number of bases you maintain, the number of layers of management, the number of staffs, and things like that.

I think that whenever you have a wartime situation or a peacetime buildup, as we had in the early 1980s, you generally build up too much compared to what you really need in the more constrained periods.

So, I think that is another area that will have to be looked at very hard. It is not easy because closing bases, reducing staffs, and things like that, are always resisted by a lot of folks. But I think, again, that is an area that has to be looked at.

OLD WEAPONS

I think old weapons, too, have to be looked at. When John Warner and I served under Mel Laird there in the late 1970s, we reduced the Navy from 900 ships to 600 ships, and what we really got rid of was the old World War II destroyers and ships that could have steamed for another 10 or 20 years, costing a lot of money. But we made the decision—and it was Mel Laird's leadership there that brought it all about—to reduce those old weapons systems and to maintain modernization.

I think that becomes one of your great decisions here in the next 5 years, and that is, are you going to maintain old systems or fund the new systems. The Navy ships that you have today, like the 688, the Trident submarine, most of the carriers, and the Aegis cruisers, were all funded in that period of really great monetary constraint.

But it could not have been done if you had not been willing to take out those older weapons and some of those older units. So, I think that is another tradeoff area that has to be looked at very carefully.

MANAGEMENT OF TECHNOLOGY

Then I think the last area that I generally like to emphasize is, again, the management of technology. In other words, we have the capability today in so many areas—whether we are talking about medical technology or defense technology or agriculture technology—of making very costly instruments, you might say. Bombers—scanners in the medical area, and everything like that.

We have to manage that technology carefully and skillfully or the costs go out of sight. In other words, you have so many people that want to add every bell and whistle. It is the same for computer systems too. This is a big problem even in the private sector—that when people design and build these modern technical systems lots of times they go overboard. That costs a lot of money.

I think Norm Augustine in his book describes it best. Some day we will be able to afford one airplane. It is going to be the greatest airplane in the world, but there will only be one.

You do not want to get yourself into that situation. When you look at the cost of some of these weapons systems today that we are procuring, compared to what we did some years back, why, you can just see that a lot of the costs, a lot of the 34 percent increase in real dollars here have gone into really much higher technology—now, people say that they are more capable. There is no question they are more capable. But you have to tradeoff the cost of that capability with the effect it is going to have on the rest of your program.

Senator GORTON. Thank you, Mr. Chairman.

Senator EXON [presiding]. Thank you very much, Senator.

We are very pleased to have Congressman Ireland with us today, and I am pleased to recognize you for any questions that you may have at this time. Congressman.

Mr. IRELAND. Well, thank you, Senator. I appreciate, as I told the chairman, the opportunity to audit this class. It is quite remarkable and emphasizes the twin goals—we have to have good planning but we have to manage the planning right as well.

I would, if I could, just ask Mr. Bowsher, does the Congress now have, as we have evolved and gotten more information here thanks to this body here—do we now have the necessary background figures for the Congress to be constructing independently its own 5-year plan based on the actions we take? So that we have a comparison of what we are getting from the Defense Department?

Mr. BOWSHER. Well, I think you have the FYDP today, and we have been given the data in pretty good shape. We have more data, I'll ask Frank to agree or disagree—we have more data today than we ever have had. Would you agree with that, Frank?

Mr. CONAHAN. That is correct. Prior to our getting the FYDP here 2 years ago, we essentially had access only to bits and pieces of it.

Mr. BOWSHER. Right.

Mr. CONAHAN. We have it now, and we have it in tape form so that we are able to manipulate it in the same way that the Department of Defense does, and also to do our own analysis. So I think that we have the basic information, and we have the capability to do with it what needs to be done.

It was that sort of analysis that resulted in the kind of chart that you are looking at behind you.

Mr. IRELAND. Well, it seems to me that we do best in this country when we have competition. As we have competition of views, in looking at the figures both from the administration and from the Congress, we usually end up with a better product. I think one of the great achievements, as I say, originating in this body, was that we finally got the figures so that we can participate.

I think it is outstanding. Senator, I thank you for your indulgence.

Senator EXON. I believe Senator Levin will be next. Thank you very much, Congressman.

Senator LEVIN. Thank you very much, Senator Exon.

SHORTFALLS IN SUSTAINABILITY

Mr. Bowsher, I have, first of all, some questions on some shortfalls in sustainability which have been identified. I think you made reference to them in your testimony.

There have been shortages identified in air-to-air, ground-to-air missiles in the Air Force and the Navy, surface-to-air munitions in the Army. Can you tell us whether you have made an assessment overall on our sustainability, particularly in that area, from command to command? Could you tell us which commands, for instance, will be better off in sustainability in that area in 1990 compared to 1989? Which would be worse off?

Mr. BOWSHER. Let me have Frank Conahan, answer because he has headed up studies of those areas.

Mr. CONAHAN. We have canvassed most of the major CINCs, getting from them where they believe they stand in terms of both readiness and sustainability.

Going to your question in terms of sustainability. Individually and across the board they believe that there are deficiencies in the kinds of items that you just mentioned, as well as in other munitions and in ordnance.

Now, when you take that information to the Department of Defense, the Secretary and the Deputy Secretary will tell you that it is their charge to sort out priorities and that they believe that where they are in the budget now kind of balances off priorities among and between the CINCs.

To some extent that is true. To some extent munitions that the CINCs would like to have are indeed stored in central repositories here in the United States and elsewhere. Overall, however, we continue to find that there are shortages in the kinds of missiles that you mentioned. The precise shortfalls are classified, as you will appreciate, but they are real indeed.

Senator LEVIN. Are you able to tell us whether you have compared these commands 1989 to 1990 in that area?

Mr. CONAHAN. No, sir, we have not made that comparison.

Senator LEVIN. The sustainability area?

Mr. CONAHAN. No. We took a snapshot in time comparing the requirements, as they saw them, with what we have on hand.

Senator LEVIN. Are you then able to give us an overall assessment as to whether or not we are better off, about the same, or worse off in sustainability in the 1990 budget than we were in the 1989 budget? Can you do that?

Mr. CONAHAN. I cannot do it between the 1989 budget and the 1990 budget, but I can say that we are better off between earlier budgets, for example, the 1985 and 1986 budget now.

Senator LEVIN. Would you be able to give us that for the record?

Mr. CONAHAN. Yes, sir. I can give you that for the record.

Senator LEVIN. In other words, if we adopted the 1990 budget as proposed as to where we would actually be in worse shape in terms of sustainability than we were in the 1989 budget?

Mr. CONAHAN. Yes. But let us take a look at what we have in terms of the information and the information that is available before I can say that your answer gets completed.

Senator LEVIN. All right. See if that——

Mr. CONAHAN. Yes, sir.

Senator LEVIN [continuing]. Is feasible. We would appreciate it.

SPARE PARTS

In the area of spare parts, I think General Welch told us that the Air Force has not purchased sufficient stocks of spare parts and there is going to be a problem there.

Can you tell us whether or not you have found that and, if so, whether we are going to have aircraft sitting around without working engines.

Mr. CONAHAN. I think that there are spare parts shortages. At the same time, I have to say that over the past several years they have purchased spare and repair parts which are not needed. I think that what we have to do is to take a look at how this whole area was managed.

While there are some shortages, there are significant unrequired repair and spare parts. I think, while acknowledging that, we have to say they have to do a better job themselves and it is not all a matter of getting more money put into that.

Senator LEVIN. Can you try to identify for us for the record where you think there is a shortfall in meeting the requirement for spare parts, where you agree with the requirement, and where there has been a cutback in the budget request in 1990 from 1989. Could you give us that for the record.

Mr. CONAHAN. Again, to the extent that that information is there, we can get it for you. Yes, sir.

Senator LEVIN. You made reference, I believe, in your testimony to red flags that should be heeded. Were those your words?

Mr. BOWSHER. Those were Secretary Cheney's words maybe.

Senator LEVIN. Did you make reference to them in your testimony also?

Mr. BOWSHER. I do not believe so.

Senator LEVIN. Okay. Thank you. Thank you.

Chairman NUNN. Senator Wirth.

Senator WIRTH. Thank you very much, Mr. Chairman.

Mr. Bowsher, again, thank you for the excellent work that you all do so consistently and with such a great amount of trust from all of us up here, and I think the American public.

BOW WAVE

What we are talking about here is really a mega bow wave. Is that right?

Mr. **Bowsher**. It is a bow wave and it is big dollars. There is no question.

Senator **Wirth**. Is this a bigger bow wave than that which we had all talked about last year? You remember there was a lot of discussion about the bow wave then. Are we now finding that it is larger this year, or at this point, than it was last year?

Mr. **Bowsher**. No. In fact, what I think is kind of amazing is that they have been able to bring it down as much as they have without greater impact. Now, I still think you have the tougher decisions ahead here if the funding levels off, as it would appear that it might well level off.

As we pointed out in our figures here, we do not have future cost overruns and problems that will come about because of stretchouts and things like that.

So, I think the bow wave problem is still here, but I would say that I was somewhat surprised when I saw them bring it down by the $300 billion, that they were able to do it without more impact on force level and major weapon programs.

Senator **Wirth**. Is it fair to say that in the next 2 or 3 years we are going to be trying to stuff a $400 billion commitment into a $300 billion package? Is that——

Mr. **Bowsher**. I think that is right——

Senator **Wirth**. Is that about right?

Mr. **Bowsher** [continuing]. About where you're at. I do not know whether those are the exact numbers, but you are stuffing a much bigger program into a budget.

Senator **Wirth**. Now, what happens—this assumes a relatively consistent level of funding——

Mr. **Bowsher**. Yes.

Senator **Wirth** [continuing]. For DOD, right?

Mr. **Bowsher**. Yes. Well, what we have done as we have pointed out, you could have an extra $50 billion problem here if you come down to a no-growth situation. Their numbers are based on the 1-1-2-2 percent real growth increase. If you approve a level funding, that gives you $50 of the $150 billion problem that we tried to highlight today.

Senator **Wirth**. OK. So, if you have a no-growth situation, the problem becomes at least $50 billion worse——

Mr. **Bowsher**. Yes.

Senator **Wirth** [continuing]. Over the next 5 years? Is that right?

Mr. **Bowsher**. Yes.

Senator **Wirth**. What happens if you get into a Gramm-Rudman situation in which under Gramm-Rudman it is required that the budget be brought down further. The President has said, "read my lips; no taxes." I do not know where the money is going to come from if you do not raise taxes and if you do not cut the budget.

If Gramm-Rudman requirements kick in, as they—have you done any kind of analysis of what that in turn does to the situation?

Mr. **Bowsher**. We have not done that analysis, but I can talk to it on a general basis. That is, if you have to come down to large sequesters, why, then you are going to have a major impact on the defense budget. I think one thing that everybody should be aware of, and it is something that I have talked with Senator Exon and others about, is that we are using these trust fund surpluses to meet the targets here.

If at any time people begin to worry about that, using the payroll taxes, you might say, to fund current operations, why, you have a situation here that could drive the sequester up to really huge numbers. Also——

Senator WIRTH. If you take trust fund revenues out of the consolidated budget—say, if you were just to take those out——

Mr. BOWSHER. Yes?

Senator WIRTH [continuing]. Then your deficit would be much, much larger, and if the deficit were to be much, much larger and Gramm-Rudman continues and we get to a sequester, then the trouble for this budget becomes even more intense.

Mr. BOWSHER. Oh, much more intense.

Senator WIRTH. So, we have three problems. Number one, is the bow wave which is the $400 to $300 billion package. Add to that a no-growth situation—it makes it worse, which is another $50 billion over 5 years. Third, if you were to add either a Gramm-Rudman sequester under the best of terms or under the worst of terms, one in which trust fund revenues were taken out of the budget, then this problem becomes absolutely——

Mr. BOWSHER. Very dramatic. Yes. Yes.

Senator WIRTH. It seems to me those are the steps of severity that what we have talked about here as being the most benign financial scenario.

I would guess that probably there are worse ones that come up, one being the no-growth situation. The second being Gramm-Rudman. Third, being what do you do when you are faced with the trust fund revenue question.

Mr. BOWSHER. That is right.

Senator WIRTH. Those are three further steps of how severe this might well be.

Mr. BOWSHER. There are a couple of others too. That is, one is the inflation rate that has been assumed in here. In other words, it is very low and so we feel that is another $50 billion roughly of potential problems, if you were to have an inflation rate equal to what CBO is currently using, which is about 4 percent.

Senator WIRTH. What is the other one? You say there are a couple of other problems.

Mr. BOWSHER. The other one is the fact that the wedge, you might say, the flexibility has been taken out by some of the reserves that were in there. The chances are you are going to need some of that reserve.

Now, Senator Warner did point out that the ground-rules for the FYDP were not to have those in there in the first place. But, they were in there and the chances are you are going to have them. In other words, you always have certain operations, like the Persian Gulf, and things like that, over a 5-year period. You always have cost overruns in some of your major weapon systems. You just have certain things that come along.

So, you have to recognize one more time, to use your words, Senator, that this is the most benign situation.

Senator **Wirth**. This is the most. But what has been widely reported and what you came in to testify about today is the most benign path.

Mr. **Bowsher**. Yes, that is right.

Senator **Wirth**. It probably is an optimistic path. Is that right?

Mr. **Bowsher**. Yes, that is right.

Senator **Wirth**. It seems to me that putting the low inflation rate right at the top is much more likely to be a problem. I mean that is going to occur for sure. We are going to have a higher inflation rate.

Mr. **Bowsher**. Yes.

Senator **Wirth**. I mean, I would think. You know, I do not know of anybody who does not believe that except Mr. Darman. A no-growth situation may well be a very real one as well.

The question, that remains then is what do we do? But I think that before you even get a sense of urgency among people as to what has to be done, you have to lay out the size and scope of the problem.

INTEREST COSTS

Mr. **Bowsher**. If I could even give you one more problem that I think people are not focusing enough on. That is this interest cost in the overall budget.

Chairman **Nunn**. We are already depressed. [Laughter.]

Mr. **Bowsher**. But, truly, you are at $180 billion interest cost. It is soon going to be $200 billion if interest rates stay up at this level. You just allocate that over the rest of the budget. If you say that the Medicare and the Social Security are self-financing, then about half of that has to get allocated to the defense. So I often say to the military people I talk to about this problem, that I understand they are frustrated and they are perplexed because the defense budget is a lower percentage of the budget and the GNP, than it has been for some time.

But, really, what you are talking about here—another way to look at it is that you have a $400 billion annual budget now for defense, but the first $100 billion goes for interest. The more that interest cost grows in your overall budget, the more that is going to crowd out military programs and other programs at the Federal level.

Chairman **Nunn**. How do you attribute $100 to defense as opposed to—how do you allocate?

Mr. **Bowsher**. What we did was we——

Chairman **Nunn**. What is the total interest bill?

Mr. **Bowsher**. Well, the total interest bill right now is $180 billion. But that is based on some optimistic assumptions too. So, if you figure we are going to have another year or two of large deficits and the interest rates are going to stay up approximately where they are right now or just a little less, you are looking at $200 billion. So, the question is how do you spread $200 billion to the rest of the Government.

Well, if you look at the Medicare and the Social Security, which has payroll taxes, not only has it been self-sufficient all through this decade, but it has been throwing off these big large surpluses. See? You exclude that out and then you just take your revenues versus the rest of your budget, defense is about 50 percent of that. So, that is how you do it, and it is a rough estimate.

I think it is an indication of the problem that you are facing this year and in future years when you have the debt and you are going to be debating a $2.9 trillion debt ceiling here probably in August or September. Even if you use President Reagan's figures that he sent over in January, that is going up another trillion dollars, and that shows how these Gramm-Rudman numbers do not tell the full story, I believe.

In other words, it is the debt that is showing you how much the real deficit is. You know, when we do the S&L off budget there, we are still going to pay that interest through the Treasury. So, you know, you have billions of dollars of interest costs now coming from that.

I was pointing out to a group the other day that our solution here for the S&L crisis is bigger than the Marshall Plan. In other words, I used to say 2 or 3 years ago that this is going to be a bigger bail-out than New York City, Chrysler, Lockheed and Penn Central all put together. Now it is bigger than the Marshall Plan, if you go back and escalate those dollars.

So, again, that is going to be a cost in the budget over here. It is not going to be counted for the bonds that they actually sell this year, but the interest cost is going to come at you and the debt is starting to really work against us, I think.

Chairman **Nunn**. Could you furnish for the record what you believe to be the accurate portrayal of what the deficit really is by showing, say, a 4- or 5-year chart on the increase in the debt?

Mr. **Bowsher**. Yes. Yes, I could.

Chairman **Nunn**. So we would have that in the record.

Mr. **Bowsher**. Yes. Sure could.

Chairman **Nunn**. Could you put it on a chart where it shows the increase in the debt as compared to what we are showing on the Gramm-Rudman as the deficit so we see the difference between the two?

Mr. **Bowsher**. Yes. I would like to show you too how the trust fund surpluses play into the calculation of the unified debt and everything like that—or, deficit.

Chairman **Nunn**. I heard a figure today that if you took out all the trust funds, the operating deficit was really $280 billion. I had heard before it was $200 billion. Which one is closer?

[The information referred to follows:]

The following table provides deficit estimates as they relate to Gramm-Rudman Deficit Reduction Act targets:

ANNUAL DEFICIT ESTIMATES

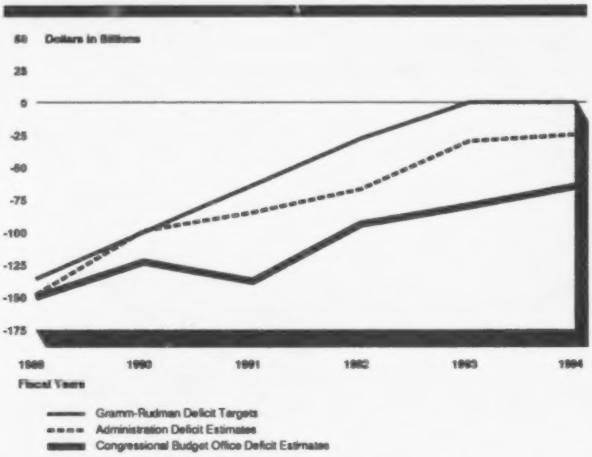
[In billions of dollars]

	1989	1990	1991	1992	1993	1994
Administration estimates	−148	−99	−85	−67	−30	−25
CBO estimates	−150	−123	−138	−94	−80	−65
Gramm-Rudman targets	−136	−100	−64	−28	0	0

Both the Congressional Budget Office and Office of Management and Budget (administration) deficit estimates agree that the Federal budget will not meet the zero deficit target for 1993 set by the Gramm-Rudman Deficit Reduction Act. The administration estimates that the 1993 deficit will miss the Gramm-Rudman target by an estimated $30 billion, while the CBO is less optimistic for 1993 estimating that the budget will be off target by $80 billion. Assuming that a balanced budget will continue to be a goal for 1994, CBO estimates that the 1994 budget will miss its target by $65 billion while the administration's numbers reflect an estimated $25 billion deficit.

As you know, under provisions of the Gramm-Rudman law, the annual deficit prior to 1993 cannot exceed the deficit targets by more then $10 billion without triggering automatic budget cuts known as sequesters. If the administration's estimate is correct, sequestration will occur in fiscal year 1991 while the CBO figures indicate that it may occur as early as fiscal year 1990.

Congressional Budget Office and Administration Estimates of the Administration's Budget Plan as It Relates to the Gramm-Rudman Deficit Reduction Act



Sources: Office of Management and Budget; Congressional Budget Office.

Note: The Gramm-Rudman figure for 1994 is reflected as zero although the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 established targets for fiscal years 1988 through 1993 only.

Mr. BOWSHER. Well, the $200 billion is if you just take out Social Security. If you take out all the trust funds, it is up there in $260 to $280 billion.

Chairman NUNN. Senator Wirth, go ahead. I interrupted you.

Senator WIRTH. No, my time has expired. I wanted to pursue just a little of where we go from here, in their sense of that while we are here.

Chairman NUNN. Okay. Let me ask one other question on this point and then I will get right back to you.

SPENDING ON DOE

What about your assumption on how much we are going to spend from the military part of DOE and the cleanup and the nuclear business, the safety of the modernization.

Mr. **Bowsher**. Yes.

Chairman **Nunn**. Whose numbers are you taking to get this projection here?

Mr. **Bowsher**. The cleanup costs for that program are not included in these numbers, Mr. Chairman. We think that is going to be over $100 billion.

Chairman **Nunn**. Somebody said that Mr. Bowsher never showed up unless there was at least a $100 billion problem. [Laughter.]

So when you see him coming, you can talk about $100 billion. So, that is another $100 billion?

Mr. **Bowsher**. It is another $100 billion. It is not in here.

Chairman **Nunn**. How much of that is defense the way normally it is allocated?

Mr. **Bowsher**. I do not believe——

Mr. **Conahan**. Well, they are not in the budget at this point.

Mr. **Bowsher**. No. That is all over in the Department of Energy.

Chairman **Nunn**. I know it is not in the budget now.

Mr. **Bowsher**. Yes.

Chairman **Nunn**. But, I mean, Defense picks up a portion of the DOE budget.

Mr. **Bowsher**. I would have to go back and calculate that, Mr. Chairman.

[The information referred to follows:]

We have estimated that up to $155 billion will be needed to clean up and modernize the DOE nuclear weapon's complex. All of these funds will come from DOE's funds unless otherwise directed by Congress. For fiscal year 1990 DOE plans to spend $3.6 billion for modernizing and cleaning up its facilities.

Chairman **Nunn**. Senator Wirth.

Senator **Wirth**. Well, that is the cherry side of the ledger. Let us look at the other side of the ledger. You were saying as you began to answer my first questions, that the time for tougher decisions is ahead.

Mr. **Bowsher**. Yes.

Senator **Wirth**. What does that mean?

MAJOR WEAPONS SYSTEMS

Mr. **Bowsher**. Well, I think that when you look at the major weapons systems that the tough decisions were made this time—you were talking about a relatively limited number.

Senator **Wirth**. What tough decisions were made?

Mr. **Bowsher**. Well, the V-22 cancellation and the F-14D program I think was cancelled. But I think you well might be looking at more difficult ones in the future here.

Senator **Wirth**. Are there some sort of logical——

Mr. **Bowsher**. In other words, those were not the main ones.

Senator **Wirth**. I understand. It looked to me like they were sort of on the margin. You know, that——

Mr. **Bowsher**. I think except for the V-22 that it was. Yes.

Senator **Wirth**. OK. Now, what are the ones that—clearly, we are talking about canceling major weapons systems to get into the $300 billion envelope. Is that not right? You cannot get from here to there if you do not cancel weapons systems? Is that right?

Mr. **Bowsher**. I think the weapons systems and the force levels are the two big decisions that will be forced upon the decision-making process here in defense in the next few years.

Chairman **Nunn**. Senator Wirth, could I ask one more question and then turn it over to you because I have a group back here? It is right along this line.

CLOSURE CUTS

Do you believe that we can make that $150 billion closure between the Five-Year Defense Program and realistic budgets that you see coming without cutting force structure further?

Mr. **Bowsher**. No, I do not, Mr. Chairman.

Chairman **Nunn**. Do you believe we can do it without cutting overseas troop deployments?

Mr. **Bowsher**. I think that should be part of the consideration and will have to be part of the consideration. Of course, the negotiations have to be taken into a big part of that discussion. But I think that is an area that should be looked at.

OVERSEAS BASES AND DEPLOYMENTS

Chairman **Nunn**. Has GAO done any kind of survey on overseas bases and overseas deployments in terms of——

Mr. **Bowsher**. We are currently doing that and we would have that report——

Mr. **Conahan**: Late this summer.

Mr. **Bowsher** [continuing]. Late this summer.

Chairman **Nunn**. You have a lot of people working on that?

Mr. **Bowsher**. Yes, we do. It is a big project.

Chairman **Nunn**. That will be a comprehensive project?

Mr. **Bowsher**. It is a comprehensive project and the first report that we will be issuing to you is more of a status report as to where everyone is. Then I think once we can show that, then it would probably be good to get together with you and your staff and figure out what additional reviews we should be doing.

Chairman **Nunn**. Will you have recommendations in the first report?

Mr. **Bowsher**. Probably not. It is just a factual report as to where things stand.

Chairman **Nunn**. OK. Senator Wirth, thank you very much. We appreciate both of you being here. Again, you have been a great help and enlightenment, if not encouragement. We appreciate it.

Mr. **Bowsher**. Thank you, Mr. Chairman

Senator **Wirth** [presiding]. Thank you very much, Mr. Chairman.

FORCE STRUCTURE AND WEAPONS SYSTEMS

Let me just follow-up very briefly, if I might, Mr. Bowsher. You are saying that the only two choices that exist are force structure and weapons systems?

Mr. **Bowsher**. No, not the only two, but two of the major ones.

Senator **Wirth**. Well, the other ones are to nibble away and cost us more money by stretchouts or getting rid of——

Mr. **Bowsher**. No, I never recommend stretchouts.

Senator **Wirth**. No, but those are—I am not saying you recommend that. But those are some of the other choices that are available.

Mr. **Bowsher**. Some of the other choices are, I think, in looking at what I always call overhead. The bases, staffs, things like that. I think you have to look at it both in the industry and also in the defense program itself.

DEFENSE INDUSTRIES

Senator **Wirth**. What do you mean looking at it in the industry and defense program?

Mr. **Bowsher**. Well, I think any time you have a war situation, as we had in the Vietnam war, or when you have such a large buildup as in the early 1980s, you generally build up your overhead larger than what you need in the other years and you have to go through a period of slimming that back. I do not think that has happened so far.

Senator **Wirth**. And the defense industries are going to be contracting as well.

Mr. **Bowsher**. Yes. In other words, not only the industries that have programs canceled, but the industries that have reduced programs are going to. I do not think the Defense Department is going to be able to afford to continue to fund them at the level they were in the early 1980s.

Senator **Wirth**. Does not that in turn raise some very significant questions related to the non-discussions that we all have here of industrial policy? I mean, here we have some very important industries that are the repositories——

Mr. **Bowsher**. Yes.

Senator **Wirth** [continuing]. Of an enormous amount of technology and trained individuals and expertise that are really part of a national resource. Or, at least, I would view it that way. That we have to make a choice as to whether or not we are going to allow, some businesses to go out of existence and merge, or if a more concerted kind of thought process ought to be put into this as to where do we want this set of industries to be. Assuming contraction, where do we want it to be 5 years from now and 10 years from now?

I would assume that that should be a major issue——

Mr. **Bowsher**. I would think that the——

Senator **Wirth** [continuing]. Of policy discussion——

Mr. **Bowsher**. Right.

Senator **Wirth** [continuing]. Would it not?

Mr. **Bowsher**. I would think that the people over at defense today would be looking at some of those issues.

Senator **Wirth**. Are they? Do you know if anybody has?

Mr. **Bowsher**. I do not know whether they are or not. No, I really do not.

I think another thing that you have to be very careful of is a lot of the economists, especially the macroeconomists, will tell you that you can have a major cutback in defense and not impact the economy too much.

That might look true on an overall basis, but we have very high concentrations by certain regions in this industry and where this money is spent. I think, again, that regional concern should be part of the planning process as you try to slim this thing down. Because if you do not, you will run into real trouble.

Senator WIRTH. What is its economic impact going to be across the country? But, then, where do we want this set of industries to be as part of an overall——

Mr. BOWSHER. That is right.

Senator WIRTH [continuing]. Economic structure in the United States?

Mr. BOWSHER. That is correct.

Senator WIRTH. That would seem to me to be an interesting set of questions, although it is a very difficult one for the Pentagon to focus on, right? They are probably not particularly good at what happens if you are decreasing amounts of funding. That is not part of their charter. Or, they do not want to admit, I suspect, that money is coming down rather than going up.

Mr. BOWSHER. They used to have some people over there that used to worry about those kinds of things. I know when I was over there they did. I would hope they still do have some capability in that area.

Senator WIRTH. How do we go about finding out what is going on or starting this process to—if it is an important one to do, how would we go about doing it?

Mr. BOWSHER. I would think if you made an inquiry over there through Secretary Cheney that they could give you some contact of people who might be—it used to be in the installations and logistics area.

Senator WIRTH. Ask them, one, if they have this capability.

Mr. BOWSHER. Yes.

Senator WIRTH. Second, what they are doing.

Mr. BOWSHER. What they are doing about it. Yes.

Senator WIRTH. Have you heard that they have been doing anything on this front? I mean, this is certainly an abrupt shift from that line right there, is it not?

Mr. BOWSHER. Yes, it is. No, because we have not been working in that area and so I have not been over there and I do not know what the capability is today.

WEAPONS SYSTEMS

Senator WIRTH. Moving from defense industries to weapons systems, from your perspective, or all of you at GAO having looked at this for a long period of time, are there some obvious areas that have to go from your perspective in terms of weapons systems?

You know, there are some that just stand up at the top of everybody's list and——

Mr. BOWSHER. I would not say that I would hold out obvious areas to go, but I think obvious areas that you have to look at are how many carrier task forces do you have in the Navy, how many bombers are you going to buy here, the B-1 and B-2, when they are so costly. The force level overseas, as the chairman indicated, is going to be a big factor, I think. Of course, again, I always stress the fact that we are in negotiations now, so that has to be taken into consideration.

So, those are the kinds of things that would be looked at. I think something that has not been looked at much in the last 30 or 40 years is the mix of Reserve versus Active forces. I think you can see more of an issue than some people are talking about.

MX BASING MODE

Senator WIRTH. One item that also jumps out at me is that we are presumably about to embark upon a program to decide upon a basing mode for the MX. For the purposes of basing the MX in this fashion that some people think is a good idea and some do not. We are going to spend a lot of money from there so that we can show the Soviets that we have based the MX so we can negotiate it away.

As far as I can see, that is the argument that is made for rail garrison basing. How much is that going to cost? Do you remember that off the top of your head?

Mr. BOWSHER. I do not remember offhand, but all those are very costly systems, and one thing we have tended to do over the years is just add one system after another to our strategic area without looking at them and making tough decisions.

I just wonder, when you are looking at these kinds of budget numbers, whether you are going to have to look more decisively at some of these strategic issues. Again, they are in negotiations with the U.S.S.R. But, you know, how we do it can cost money, as you point out, in a big variety of ways here.

Senator WIRTH. It seems to me you can negotiate by having the weapons system. In the ground and ready to go, and then negotiate that away. Or, it seems to me there is another position to negotiate from in saying, hey, we are not going to go ahead and build this sort of thing and we want to negotiate from that perspective. We always can go ahead and built it.

Mr. BOWSHER. Yes. It was a costly model, as you know.

Senator WIRTH. It is a very costly model.

Mr. BOWSHER. That is right. That is exactly right. I agree with that.

Senator WIRTH. It seems to me that that is one right out there. If the world is changing as rapidly as it is, to go into a basing mode like this at a time when from all these Ireland figures would suggest we do not have any money. I mean, he is the villain, Andy Ireland is. He is the guy that caused all this to happen. [Laughter.]

Well, Mr. Bowsher I really appreciate, again, your good work on this. We have to figure out how to take all these variables and illustrate—people just do not believe this. You know, I spoke to the Air Force Association in Colorado and was trying to explain to them what is going on and what these efforts are. The looks of disbelief out there from a very sophisticated group of people who deal with this was disheartening.

Mr. BOWSHER. Yes.

Senator WIRTH. I mean, if I had said that was the benign path, I probably would have been howled out of the room for pointing this out. But this is the case and we have to learn how to deal with it and allow local communities and areas that are dependent upon defense to start that process of adaptation now.

Mr. BOWSHER. That is right.

Senator WIRTH. I would think.

Mr. BOWSHER. As I think was mentioned by the chairman, we have appeared here 3 years in a row and the first year we were talking about financial problems which were coming down the road, and I think this year you are beginning to see some of the tough decisionmaking that——

Senator WIRTH. Oh, boy.

Mr. BOWSHER [continuing]. Has to take place. I think any way you add the numbers up, the next few years are going to be very difficult.

Senator WIRTH. Well, thank you very much, Mr. Bowsher. I want to just commend Congressman Ireland, whom I have known for a long time—we have served together in the House for many, many years. Andy you have really done a great service. I know you got a lot of flack for doing it, but you really did the right job and that is very helpful to all of us and I think a real service.

Do you have anything else?

Mr. IRELAND. No, I do not have anything.

Senator EXON [presiding]. Thank you very much, Senator. I just have a question or two. I guess we are winding down. I would be glad to recognize, after a question or two, either Senator Wirth or Congressman Ireland, if they have any further questions.

Mr. Bowsher, the chairman of this committee and others knowledgeable about the defense procurement issues regard our procurement procedures as being a cure that is almost worse than the disease that it is meant to control. Senator Nunn would like to see some pilot projects upon which there is some degree of consensus as to the need to identify the high priority items which would operate under a set of streamlined procurement procedures.

Has your research identified any likely candidates in this area? What is your assessment concerning the feasibility of streamlining procurement regulations?

Mr. BOWSHER. Well, we are doing a big job right now on the procurement process. I think what might be best, Senator Exon, is for us to complete that and then come up and see if there are any specific weapons systems that would fit into a streamlining approach.

Senator EXON. Well, when do you think you might have something?

Mr. BOWSHER. Well, we hope to have this overall report sometime this summer. Then it would be good if we could come up and just sit down with you and the chairman and look at some of the weapons systems and see if we could apply some of the overall concepts that we are going to be pointing out as possible improvements.

Senator EXON. Thank you. We will look forward to that. That will be very helpful.

NEW PRODUCTION REACTOR

I have been informed that the GAO believes that a new production reactor for tritium will take 12 to 14 years, not 10 years, as the Department of Energy has indicated. This was quite shocking to me since tritium production comes under the Strategic Subcommittee that I have been integrally involved in it for a long time. I frankly believe that 10 years is way too long.

What was your reason a longer period than a previously stated 10 years? Were you taking into consideration some environmental consideration or lawsuits? Why the extra time over what the Department of Energy has anticipated?

Mr. **Bowsher**. I do not have that information right at my fingertips, Mr. Chairman, but we could have our experts in that area and the ones that gave that briefing come up and tell you what the problem is. I knew it was going to be longer, but I do not know the exact reasons.

[The information referred to follows:]

In its August 1988 report to the Congress the Department did not provide a clear schedule for completing the new production reactors or when tritium would actually be realized. The report simply stated that approximately 10 years would be needed to provide new production capacity.

We found, however, that the 10 years did not include the time needed for testing, nor the time needed to produce and extract the tritium. In the case of the heavy-water reactor, the schedule would thus have to be increased from 10 to 12.5 years because 1 year is needed for testing and 1.5 years for production and extraction of a full load of tritium.

The modular high-temperature, gas-cooled reactor is somewhat different in that it will be built in phases, but it will be a total of 16 years, instead of 10 years, before DOE will obtain the first full load of tritium or 50 percent of goal from this reactor. Again, the 16 years includes the time necessary to produce and extract the tritium.

Senator **Exon**. I would just simply say that if we turn this over to the Corps of Engineers to do it, it would take 20 years. But, if possible, maybe if we could get the Seebees to do it, we could do it in 18 months.

It just seems to me that eventually when the people of the United States come to the realization that if we are able to start any of those reactors at the Savannah River—which is right up in the air right now—we are still going to be woefully short of the basic tritium needs.

That is a critical, critical national defense need of the United States, probably more important than any other that I can think of.

Mr. **Bowsher**. I think it is one of our most serious problems right now, Senator Exon. A lot of people are not fully up to speed on the magnitude of the problem, I think. So, we are doing a lot of work in this area and we would be happy to come up and share our views and give you whatever briefing you would like.

Senator **Exon**. Thank you very much, Mr. Conahan, and thank you, Mr. Bowsher. It is always good to have you before the committee.

Do you have any further questions, Congressman Ireland?

Mr. **Ireland**. No, Senator. Thank you.

Senator **Exon**. There may be some additional questions for the record that we will ask you to respond to as quickly as possible. Thanks again for being here.

We are adjourned.

Mr. **Bowsher**. Thank you.

[Questions for the record with answers supplied follow:]

Questions Submitted by Senator Carl Levin

ADOPTING 1990 BUDGET

Senator **Levin**. Provide for the record an assessment of whether or not we would be better or worse off in sustainability if the 1990 DOD budget was adopted.

Mr. **Bowsher**. We did not do a comparison to determine whether sustainability would be better or worse off if the 1990 budget was adopted. Rather we looked at sustainability for the period 1980 through 1989 and found while improvements were made shortages exist in a number of areas such as airlift, sealift and preferred munitions. For example, while stocks of preferred munitions increased during the period inventory levels remain below requirements. Because precise shortfalls are classified this information will be provided to the committee in a briefing.

SPARE PART SHORTFALLS

Senator **Levin**. Provide for the record where there are shortfalls in meeting spare parts requirements and if we agree with these requirements. Also provide information on cutbacks in funding for spare parts between the fiscal years 1989 and 1990 DOD budgets.

Mr. **Bowsher**. While we did not analyze the validity of spare parts requirements, or shortfalls in meeting these requirements, we did assess a number of indicators that are directly affected by the level of spare parts funding. We found that readiness indicators such as mission capable rates showed overall improvement.

Sustainability indicators on the other hand show a mixed picture. For example, war readiness spare kits/base level self-sufficiency spares (WRSK/BLSS) in the Air Force are currently at high levels. However, spare parts war reserve stocks in the Army are significantly below requirements. Because precise data is classified this information will be provided to the committee in a briefing.

While we did not analyze the difference in spare parts funding between the fiscal years 1989 and 1990 DOD budgets we did analyze the fiscal years 1988–92 Five Year Defense Plan (FYDP). Our analysis shows that funding for spare parts over this five year period was reduced by $8.13 billion when compared to the 1990 FYDP. Additional reductions to the 1990 FYDP have been proposed by the Bush administration. We are currently analyzing these proposed reductions to determine which programs are specifically affected.

The affect of reduced spare parts funding on readiness and sustainability will depend on operating and training levels and war reserve requirements. For example, if flying hours remain at current levels and spare parts funding decreases, it can be expected that mission capable rates will decrease.

Questions Submitted by Senator John Warner

POTENTIAL BUDGETARY IMPACT

Senator **Warner**. Mr. Bowsher, you have provided some macro information for us concerning the $150 billion difference between the current Five Year Defense Program (FYDP) and your analysis of its true budgetary impact. Would you provide for the record more detail on the three categories of this discrepancy, including a breakout by fiscal year of each portion of the differences, account or line item detail, and other supporting data which you feel would be of assistance in pinpointing this issue.

Mr. **Bowsher**. The fiscal years 1990–94 FYDP exceeds funding estimates by at least $147 billion. This estimate is based on the following 4 primary factors, (1) $12.2 billion reduction required to correct overstatement in real growth estimates; (2) $42.3 billion reduction required if Congress funds projected inflation but no real growth; (3) $45 billion reduction required to bring FYDP down to current topline guidance; and (4) $47.8 billion in program reductions to accommodate the affect of more realistic inflation assumptions.

Adjustment to Fiscal Year 1990 Growth Base: Currently, the outyears of the FYDP reflect 1 percent real growth for fiscal years 1991 and 1992 and 2 percent real growth for fiscal years 1993 and 1994. Using these growth projections DOD's total FYDP is $1,614 billion over the 5-years. These growth figures, however, are calculated based on President Bush's initial FY 1990 submission of $299 billion and not the currently proposed FY 1990 budget of $295 billion. This requires an initial downward correction in DOD's estimated funding levels of $12.2 billion to $1,602 billion (see table I).

TABLE I.—ADJUSTMENT TO NEW BUDGET BASE OF $295 BILLION

[In billions of dollars]

	1990	1991	1992	1993	1994	Total, 1990–94
1991 to 1994 real growth (DOD)	[1]295.6	311.0	322.0	335.9	349.8	1,614.3
1991 to 1994 real growth (GAO)	295.6	308.1	319.6	333.2	345.6	1,602.1
Subtotal	0.0	2.9	2.4	2.7	4.2	12.2

[1] The current fiscal year 1990 defense budget proposal is $295.6 billion as indicated in table I. DOD has calculated it's proposed real growth in the out-years 1991–94 on President Bush's initial submission of $299 billion for fiscal year 1990.

Zero real growth.—Assuming Congress grants DOD full inflation funding, but no real growth, for fiscal years 1991-94 additional reductions of $42.3 billion will be required (see table II).

TABLE II.—ZERO REAL GROWTH, FISCAL YEARS 1991–94

[In billions of dollars]

	1990	1991	1992	1993	1994	Total 1990–94
Bush Amend, Adm Inf, 1,1,2,2	295.6	308.1	319.6	333.2	345.6	1,602.1
Bush Amend, Adm Inf, 0 Real	295.6	305.1	313.3	320.2	325.6	1,559.8
Subtotal	0	3.1	6.3	13.0	20.0	42.3

Negative planning wedges: Currently, DOD's FYDP accounts total, $1,659.3 billion. To bring the overall FYDP down to the President's topline guidance of $1,614.3, DOD used negative adjusting entries for fiscal years 1992, 93, and 94 totaling $45 billion (see table III). According to DOD, the $45 billion adjustment to program estimates represents reduction decisions planned but not yet made.

TABLE III.—REDUCTIONS PLANNED BUT NOT YET MADE—$45 BILLION

[In billions of dollars]

	1990	1991	1992	1993	1994	Total, 1990–94
FYDP accounts	295.6	311.0	336.0	350.9	365.8	1,659.3
Submitted Bush toplines	295.6	311.0	322.0	335.9	349.8	1,614.3
Subtotal	0	0	14.0	15.0	16.0	45.0

Inflation Assumptions: The Administration's inflation assumptions are very optimistic. Current estimates assume inflation will be 3.6 percent in fiscal year 1990 and fall to 1.7 percent by 1994. CBO inflation estimates assume inflation will be somewhat higher than 4 percent over the entire five year period. Under CBO's inflation assumptions DOD will experience $47.8 billion in lost purchasing power over the 4 year period 1991-94. In other words, nearly $50 billion in current defense programing would not be funded under the Administration's proposal (see table IV).

TABLE IV.—CBO VERSUS ADMINISTRATION INFLATION ASSUMPTIONS

[In billions of dollars]

	1990	1991	1992	1993	1994	Total, 1990–94
Bush amendment, CBO inflation, 1,1,2,2	295.6	311.1	327.1	347.3	368.8	1,649.9
Bush amendment, administration, inflation, 1,1,2,2	295.6	308.1	319.6	333.2	345.6	1,602.1
Subtotal	0	3.0	7.5	14.2	23.2	47.8
Grand total	0	9.0	30.2	44.9	63.4	147.5

Note.—Figures may not add exactly due to rounding.

COST OVERRUNS

Senator WARNER. Would you provide detailed information on your estimates of cost overruns that may exacerbate this problem?

Mr. BOWSHER. It is important to note that the plans/reality gap of $147 billion outlined above assumes that all major weapons systems acquisitions will come in on time and on cost. Generally, austere budgets tend to spawn more optimistic program cost estimates and therefore larger cost overruns when the estimates cannot be realized. Historically, the military weapon systems acquisition process has been characterized by programs which are extended, exceed original cost estimates, and encompass fewer units than originally planned. In analyzing planned weapon systems cost versus actual total obligational authority (TOA) provided for 97 major weapon systems from 1963 to 1983, we found that Congress consistently had to provide substantially greater appropriations than anticipated (an average 32 percent more). We are concerned that the cost estimates for major weapon systems will again become too optimistic if DOD tries to crowd too many high cost programs into increasingly constrained budgets. A number of high cost weapon systems being considered today involve a high level of technological risk which may not be fully costed-out. These programs include the B-2 bomber, Small ICBM, Advanced Technology Fighter (ATF), and the AMRAAM missile to name a few.

Senator WARNER. Please provide total obligational authority estimates for each FYDP since 1972. Compare these five-year estimates with actual levels by fiscal year. What was the gap each year between the FYDP figures and actual funding?

Mr. BOWSHER. See table V attached.

TABLE V.—INITIAL DOD 5-YEAR DEFENSE PLANNING FIGURES ON APPROPRIATION COMPARED TO ACTUAL

[In billions of dollars]

FYDP	Initial FYDP estimate	Actual appropriation	Difference
1972	59.0	77.7	18.7
1973	55.6	80.5	24.9
1974	75.9	85.0	9.1
1975	69.0	87.9	18.9
1976	81.7	95.5	13.8
1977	84.0	107.9	23.9
1978	89.1	114.5	25.4
1979	98.5	123.6	25.1
1980	122.3	140.6	18.3
1981	132.1	176.1	44.0
1982	169.0	211.5	42.5
1983	177.4	238.9	61.5
1984	181.5	258.2	76.7
1985	253.8	286.8	33.0
1986	298.2	281.4	−16.8
1987	405.6	279.5	−126.1
1988	425.2	283.8	−141.4
1989 [1]	446.8	290.2	−156.6

TABLE V.—INITIAL DOD 5-YEAR DEFENSE PLANNING FIGURES ON APPROPRIATION COMPARED TO ACTUAL—Continued

[In billions of dollars]

FYDP	Initial FYDP estimate	Actual appropriation	Difference
1990 [1]	478.6	295.6	−183.0

[1] These figures include estimates in the actual totals for the years 1989–90.

Senator **Warner**. Provide a similar comparison for each FYDP since 1972 by comparing the total initial dollar estimates of the last 4 years of each FYDP with the total actual funding provided for those 4 year periods in each FYDP.

Mr. **Bowsher**. See table VI attached.

TABLE VI.—COMPARISON BETWEEN FYDP AND ACTUAL FIGURES FOR THE SUM OF THE LAST 4 YEARS IN FYDP'S 1972–88

FYDP	Total FYDP (billions)	Total actual (billions)	Dollar difference	Percent difference
1972	325.7	350.9	25.2	7.7
1973	343.5	378.7	35.2	10.2
1974	353.9	410.2	56.3	15.9
1975	387.4	447.1	59.7	15.4
1976	471.7	491.8	20.1	4.3
1977	507.4	559.6	52.2	10.3
1978	617.7	654.5	36.8	6.0
1979	642.3	768.4	126.1	19.6
1980	660.2	884.4	224.2	34.0
1981	871.7	988.4	116.7	13.4
1982	1,051.4	1,057.5	6.1	0.6
1983	1,390.4	1,098.3	−292.1	−21.0
1984	1,497.5	1,128.7	−368.8	−24.6
1985	1,589.2	1,141.3	−447.9	−28.2
1986 [1]	1,675.5	1,167.4	−508.1	−30.3
1987 [1]	1,518.3	1,209.6	−308.7	−20.3
1988 [1]	1,503.1	1,257.4	−245.7	−16.3

[1] These figures include estimates in the actual totals for the years 1989–1992.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

LOW READINESS OF ARMY RESERVES

Senator **Thurmond**. Your statement indicates that although there have been improvements, the low readiness of the Army Reserve raises concerns regarding the ability of the Reserve Forces to augment and support Active Forces in a major conflict. The particular concern is the capabilities of combat service support units.

What contributes to the low readiness of the Army Reserve. Second since a majority of the Active Army's combat service support is in the Reserves, to what extent are we jeopardizing our ability to support the active combat units in the event of a crisis?

Mr. **Bowsher**. The primary reason reported readiness of Army Reserve units lags behind that of active units is degraded personnel. Because of reported readiness shortfalls and the fact that reserve units comprise a larger percentage of the total Army force today compared to 1980 their ability to support active combat units is of concern. However, the Army Reserve's ability to support active combat units would depend on the intensity and duration of the conflict.

DEPOT MAINTENANCE BACKLOG

Senator **Thurmond**. I am concerned over the fact that the depot maintenance backlog is increasing in all the services. I recall the backlog in depot maintenance

has been an item of interest for this committee in the past and that services were making progress in reducing it. What is the specific problem and what suggestions do you have for this committee to resolve this continuing problem?

Mr. Bowsher. Between 1980 and 1985 the services overall made significant progress in reducing or eliminating depot maintenance backlogs. Since that time maintenance backlogs in the Army and Air Force as a percentage of funding are above 1980 levels. For example, in 1980 maintenance backlog as a percentage of funding in the Army and Air Force was 11 and 7 percent respectively compared to 17 and 8 percent in 1989. However, for the same period maintenance requirements in the Army and Air Force have more than doubled. For example, maintenance requirements in the Army increased from approximately $886 million in 1980 to $2.2 billion in 1989. Thus, while backlogs have increased the services are repairing and overhauling considerably more equipment today than in 1980.

In reviewing this area I would suggest the committee start by looking very closely at the service's maintenance requirements. The committee should ask the services to explain why requirements doubled during a period when force structure was relatively stable and many new and supposedly more reliable and maintainable weapon systems and equipment were fielded.

GUARD AND RESERVE

Senator Thurmond. The National Guard and Reserve are being issued sophisticated and maintenance intensive equipment. For example, the South Carolina National Guard is scheduled to activate a hawk missile battalion in 1991. Currently, it is activating an apache helicopter battalion. I have been told that these units require a large percentage of full-time support personnel to maintain this equipment.

In your review of the budget has the issue of full-time support personnel surfaced and are the Reserves provided sufficient full-time support personnel to effectively maintain the readiness of this new equipment?

Mr. Bowsher. We are currently conducting a review of the Army's Full-Time Support (FTS) program and evaluating the FTS requirements determination process. FTS for Army Reserve components totaled about 82,000 personnel in fiscal year 1988, up from 50,000 in fiscal year 1980. The Army's current FTS requirement is approximately 120,000.

Army officials generally acknowledge that current FTS requirements for the National Guard and Reserve are based largely on professional judgment and are not established with any degree of accuracy. As a result, the Army began a project in April 1988 to establish more accurate FTS requirements. The project is scheduled for completion in October 1989. Until completion of the study National Guard and Reserve FTS requirements are uncertain.

POMCUS

Senator Thurmond. At Monday's hearing with representatives from the unified combatants commands, I asked General Leland about the POMCUS stocks. He indicated that overall they were in good shape. Your report indicates that the Army shows some significant shortfalls in prepositioned stocks. On what do you base your findings and what are the shortfalls?

Mr. Bowsher. Our on-going work on the status of the Army's Prepositioning of Materiel Configured to Unit Sets (POMCUS) shows that POMCUS stocks are short particularly in the combat support equipment area. As such, while most POMCUS units authorized to store their equipment in Europe have the vast majority of their essential combat equipment they would be short of support equipment if they deployed.

In addition, the POMCUS program is major reorganization at this time. Where the previous approach called for distributing equipment among all the units authorized storage and to share the shortages, the current approach is to prioritize units and fill-up early deploying units first. This approach is known as "vertical fill." As a result of this on-going effort, the POMCUS program is in a state of flux with equipment being shifted from one site to another.

SHORTAGES OF KEY CONCERN

Senator Thurmond. You indicate that the shortages of preferred munitions, sealift and airlift capability are areas of key concern to unified commanders. In view of the Goldwater-Nichols Defense Department Reorganization Act are there any indications that the commanders-in-chiefs raised concerns during the budget process and if they raised them what weight was given to their concern?

Mr. Bowsher. We cannot commend on the extent to which the unified commanders raised concerns during the budget process about those specific shortages because GAO has not been given access to relevant documentation. While we were recently provided access to documents showing how the highest priorities of selected commanders fared during the last programming cycle, that access was limited. Therefore, we can neither confirm nor deny that concerns were raised over the specific shortages about which you asked. The access was sufficient, however, for us to verify that commanders are raising concerns, which are being considered, as contemplated in the Goldwater-Nichols Reorganization Act.

[Whereupon, at 3:50 p.m., the hearing was adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEARS 1990 AND 1991

THURSDAY, JUNE 15, 1989

U.S. Senate,
Committee on Armed Services,
Washington, DC.

PROGRAMS RECOMMENDED FOR TERMINATION

The committee met in open session, at 9:05 a.m., in room SH-216, Hart Senate Office Building, Senator Sam Nunn (chairman) presiding.

Committee members present: Senators Nunn, Exon, Levin, Dixon, Gore, Warner, Thurmond, McCain, and Gorton.

Committee staff members present: Arnold L. Punaro, staff director; Andrew S. Effron, general counsel; Richard D. DeBobes, counsel; Christine C. Dauth, chief clerk; Marie Fabrizio Dickinson, assistant chief clerk; Kathryn E. Bognovitz, special assistant; Daniel G. Sakura, research assistant; and Julie W. Kemp, receptionist.

Professional staff members present: Richard E. Combs, Jr., John J. Hamre, David S. Lyles, and Michael J. McCord.

Minority staff members present: Patrick A. Tucker, minority staff director and counsel; Romie L. Brownlee, deputy staff director for the minority; George W. Lauffer, Durwood W. Ringo, Jr., and Ann Elise Sauer, professional staff members.

Staff assistants present: Barbara L. Braucht, Lori M. Jackson, Cindy Pearson, Kelli Pronovost, and Debra A. Rice.

Committee members' assistants present: Jeffrey B. Subko, assistant to Senator Exon; Kenneth N. Luongo, assistant to Senator Levin; William J. Lynn, assistant to Senator Kennedy; Charles C. Smith, assistant to Senator Dixon; Milton D. Beach, assistant to Senator Glenn; Leon S. Fuerth, assistant to Senator Gore; Terrence M. Lynch, assistant to Senator Shelby; Dudley L. Carlson, assistant to Senator Wilson; Anthony H. Cordesman, assistant to Senator McCain; Robert M. Soofer, assistant to Senator Gorton; Charles G. Pearcy, assistant to Senator Lott, and Eric H. Thoemmes, assistant to Senator Coats.

OPENING STATEMENT OF SENATOR SAM NUNN, CHAIRMAN

Chairman Nunn. The committee will come to order. This morning the committee meets to continue our hearings on the amended fiscal years 1990-1991 defense authorization request. We welcome this morning to the committee Deputy Secretary of Defense, Mr.

Donald Atwood, the Assistant Secretary of Defense for Program Analysis and Evaluation, Mr. David Chu, and the DOD Comptroller, Mr. Sean O'Keefe. We are delighted to have all of you here this morning. Thank you for coming.

Our focus today will be on the major program terminations in the Defense Department's amended budget request for fiscal years 1990 and 1991. These terminations account for nearly 30 percent of the $65 billion reduction from the Reagan 5-Year Defense Plan to the Bush 5-Year Defense Plan.

I should also note that the General Accounting Office testified last month that the current 5-Year Defense Plan may still be underfunded as much as $100 billion. Mr. Atwood, at some point during the questions I will be asking you about that GAO testimony. This figure increases to about $150 billion, compared to a 5-Year Defense Plan that includes only enough growth each year to cover inflation.

For years it has been clear that the Defense Department has started more programs than could be sustained efficiently under realistic budget projections. Secretary Cheney's budget addresses this longstanding problem directly and the Secretary deserves credit for facing this challenge.

Of course, Congress is not bound to accept all of these proposed program terminations. In my opinion, however, we should act with the same degree of responsibility Secretary Cheney and Mr. Atwood did when they had to bring their 5-Year Defense Plan back in line to fiscal reality. If Congress decides to restore some of these programs, we must be prepared to identify how other programs in the 5-Year Defense Plan should be cut or eliminated to pay for these restorations.

We cannot take a 1-year approach, and I will oppose very strenuously efforts to show that we can add back a program for 1 year unless those same amendments in our committee and on the floor show how we are going to pay for the same add-back over the 5-year period. Whether I will prevail or not I do not know, but that will be my approach.

Another problem we must address this morning which also can have an important impact on the issue of program terminations is the mismatch in the budget authority and outlay figures for defense in the budget summit agreement of last April. Both before and after that agreement was announced, I raised concerns that the level of budget authority in fiscal year 1990 for national defense could not be accommodated by the outlay figure in the agreement. Unfortunately, these concerns turned out to be correct, at least as far as the Congressional Budget Office numbers are concerned.

Although the Department of Defense indicates that the amended budget request meets the budget authority and outlay targets of the budget summit agreement, the Congressional Budget Office estimates that the outlays associated with the amended budget in fiscal year 1990 are $3.8 billion above the budget summit outlay ceilings.

We will have to get into some discussion this morning, Mr. Atwood, of the differences between the DOD and the CBO outlay estimates and what we can do about it. But the reality is that CBO scores legislation in Congress. This means that to meet the targets of summit and the budget resolution as enforced by Gramm-Rudman-Hollings, we have to find a way to reduce the fiscal year 1990 defense outlays by $3.8 billion unless the CBO changes their estimates. Those who believe outlays are important will insist that we meet the fiscal 1990 outlay target, and I am sure that will include the leadership of the Budget Committees. But there are also those, and I include myself in this group, who believe we need to meet the level of the budget authority agreed to in the summit.

So we start with, if not a mission impossible, at least a mission improbable, reducing the fiscal year 1990 outlays in the amended defense budget request by $3.8 billion, while holding firm at the level of the $305.5 billion in budget authority. It is a mismatch that we have had in previous years, but this one is more serious than in previous years. One alternative of course, speaking only hypothetically, would be to reduce funding in the faster-spending personnel and operation and maintenance accounts and add funds to the slower-spending investment accounts.

For example, and this is not something I favor—I make it abundantly clear I am giving it only as a hypothetical—Congress could eliminate $2.8 billion for the military and civilian pay raises in the Department of Defense, and those pay raises outlay completely in fiscal year 1990, and we could add in funds for a major new program, like a new aircraft carrier, almost none of which would be spent in fiscal year 1990.

Now, that would be a way we could meet the targets. We could cut fast-spending accounts and add in accounts that spend out slowly, but of course would have much more impact in the long run in terms of the deficit. I do not know of anyone who advocates this, not this example certainly. But we may very well be tempted, as we get further along with this outlay budget authority mismatch, to move in that general direction, cutting out things in fast-spending accounts and adding things that do not cost much this year, but cost us an arm and a leg in future years.

This approach would solve the near-term outlay problem, but would exaggerate the problem of the investment bow wave that we already have. This approach would also reverse many of the priorities Secretary Cheney set forth in his amended budget proposals, including the major program terminations. So we have to find a way in this outlay budget authority mismatch, and I will certainly welcome any suggestions this morning from Mr. Atwood.

The alternative of cutting faster-spending accounts and the adding to slower-spending accounts would clearly force Congress to make decisions that are not in the best interest of our Nation's security. Secretary Atwood, however we resolve this dilemma this year, I hope the Department of Defense and the Congressional Budget Office, as well as OMB, can get together next year to resolve the differences in their outlay estimating techniques so we do not end up in this fiscal straightjacket again next year.

I also hope those responsible for negotiating these budget summit agreements in the future will recognize the importance of the relationship between budget authority and outlays in the defense budget. We all know what happens. The administration wants a high budget authority number, Congress wants a lower outlay number, and so the compromise is to do both. And at the time that agreement is put to rest, everybody cheers and says, we have reached an agreement, and then they hand it over to us, and the ball is simply not one that is playable on the field. You cannot do it. It is an impossibility.

So we have been faced with this before, but this year I think is, as I said, the most serious. Senator Exon.

Senator Exon. Mr. Chairman, thank you very much. I want to associate myself very directly with the remarks that you have made here today.

Gentlemen, thank you for coming here this morning. We are looking for your guidance, your help, above everything else your backing in trying to live up to the tough decisions that were made by you and the Secretary in submitting the budget.

As a member of the Budget Committee and the Armed Services Committee, I have long been concerned about the long coming crunch that I advised the then Secretary of Defense 2 years ago was going to see the next Secretary of Defense and the next administration inherit a fiscally bankrupt national defense policy.

By that I mean we had all of these new programs, black and otherwise, coming down the pike, and not enough money. And it is not unlike the situation I faced this morning and face every morning where MacArthur Boulevard feeds into Canal Road. The traffic comes in four different pipes and there is not a big enough pipe to absorb that tremendous rush. And that is what you are faced with.

The chairman mentioned the budget summit agreement and our intention to live up to that. That is the minimum we have to do. As a member of the Budget Committee and as a member of this committee, I simply say that the budget summit agreement is the minimal that we have to do, because by any usual or normal yardstick the budget summit agreement was not an honest, fiscally sound budget proposal.

And if we cannot do even this, then we cannot meet the goals of what we are all trying to do. The budget that we are facing points up more than anything else that the budget ox has been gored to death. We have to stop the hemorrhaging, and that is going to take more than just bandaging. That is going to take major surgery that is going to be very difficult and very painful in lots of places.

I especially want to echo the chairman's statements with regard to the long-term budget, which has to be the measuring stick. I simply say that, if we try and finesse a little bit here and a little bit there to keep any of these terminated programs alive, then we are going to find ourselves in a totally no-win situation and just make the matter that much worse on down the line.

There are going to be some painful cuts. There has to be some elimination of programs. Otherwise we are fooling ourselves and fooling the public and abrogating, I suggest, our responsibility. If we are indeed sincere about making the hard decisions to maintain a viable national deterrence, a viable national defense, and still be honest fiscally, we must hold the line.

Thank you for being here, and we are looking forward to working with you. And one other thing that I would like to emphasize that the chairman said, and that is anyone who wishes to add anything to the DOD budget presented to us must find not just a 1-

year off-set, but a multi-year off-set as to where they are going to get the money to do this job. We have to quit this business of just forking over a few thousand dollars here or a few thousand dollars there or a million here and a million there, because this commits us to billions and billions in the future. That is precisely where we have failed miserably in the past budget-wise, it seems to me.

Thank you for being here.

Chairman NUNN. Thank you, Senator Exon. Senator Warner.

Senator WARNER. Thank you, Mr. Chairman. I just want to express my concurrence. I checked this word with you just now and I agree entirely with the concept of the offset over the 5-year program. I welcome the Secretary and particularly Mr. O'Keefe. Finally we have you where we want you. [Laughter.]

Chairman NUNN. I think the only time we had him in that position was before when he was confirmed. [Laughter.]

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman. I certainly would associate myself with your remarks and the other members of the committee.

I would like to point out that it is fair to say that many of these decisions were reached in a hurried atmosphere, with a very short timeframe from the budget agreement to the time many of these decisions were made. It is the obligation of Congress to review these decisions and make their input.

There is an understandable charge being made that people are seeking to put in their own pet projects. It is clear that that has happened from time to time in the past. There are also legitimate questions that need to be raised and need to be answered as far as the strategic concepts are concerned, i.e., Midgetman versus Rail Garrison MX, or either-or.

I think that that issue has to be resolved to a large degree here in Congress in consultation with the administration. I think there are arguments that need to be made, for example, because Mr. Atwood mentions it in his testimony, concerning the V–22.

I have no V–22 contracts in my State. The fact is that many of us are worried about our ability to further new generations of technology as far as aviation is concerned. I think that there is a legitimate concern to ask when we can expect the LHX to come into being and is it premature to cut the Apache helicopter program.

I think it is legitimate to ask if the carrier battle group, which we estimate costs multi-billions of dollars, can be adequately protected without the continuing production of the F–14.

I think these questions are legitimate questions. I think they need to be ventilated in the environment of what is best for national security.

But I emphasize, my view is that Congress plays a role in these deliberations and that I do not intend to rubber stamp this budget simply because of the fact that we are now in a budget crunch. In fact, I would suggest a case could be made that more scrutiny and more examination needs to be made as to these decisions than perhaps ever before, as clearly the trend is going to continue as far as reduced defense budgets are concerned and the decisions that are made this year will have an enormous impact in the years ahead.

So Secretary Atwood, I appreciate your hard work, that of my good friend Dick Cheney, and everybody over there. That does not mean, however, that I am in agreement, nor do I feel constrained for any reason not to examine very carefully and argue as vociferously as possible for those programs that I think are vital to this Nation's national security. I think that Secretary Cheney acknowledged that Congress continues to play a partnership role in this decisionmaking process in his testimony before this committee.

Thank you, Mr. Chairman.

Chairman Nunn. Thank you, Senator McCain.

Senator Warner. Mr. Chairman, I just wonder if I might take another minute of the Secretary's time and other representatives, because we want, the chairman and I and other members want, to broadcast a little to our own membership.

Yesterday the minority budget professional Ann Sauer, a very competent individual, at my request ran a little total here, Mr. Chairman, of some of the things that we have learned. And this information is pretty well available to your side of the aisle. If we were to restore all the terminated programs, that is $3 billion. Other programmatic add-ons that have been requested by other members of the Senate not on this committee amount to $1.8 billion.

The Guard and Reserve package that has come over the transom, under the transom, and some through the store, is $1.2 billion. The military construction add-ons that we have received—they are very popular on our side; do you get this many communications?

Chairman Nunn. We are a little bit more fiscally restrained, but not very much. [Laughter.]

Senator Warner. They are $92 million. And we added that up to $6.1 billion in terms of other interests by Members of the Senate. So we have our job cut out here on the committee. I am glad that the chairman, with whom I consulted yesterday in preparation for this meeting, concurs absolutely in the offset concept.

Chairman Nunn. Thank you very much, Senator Warner. My main point, and I think it bears repeating, is that Congress always has the right to review these budgets, always has the right to make changes, and always will make changes. Some of the changes I agree with, some I do not. But that is part of our constitutional system. I do believe, though, that we have an obligation, as I mentioned, to take a look at not just how much something costs in 1 year, but how much it is going to cost over 5 years. If we get away from that basic premise, then we are just kidding ourselves.

You can always find enough money to start a new program or add something back for 1 year if you do not have any obligation to look beyond that. That is the reason I am in favor of 2-year budgeting. We are creeping along toward that. But frankly, until the higher authorities in Congress and the White House get together on a longer-term budget plan, there is no way we could have a 100-percent 2-year budget over here, because the defense number is one number, but we do not have the other numbers that are agreed to and we do not have any semblance of anyone's plan meeting the second year of the Gramm-Rudman-Hollings target.

Senator Warner, thank you for your comments. I think you and I are in complete accord on that general approach, not preventing anyone from adding back any program they have to add back, but at least insisting that we take a longer-term look, not just 1 year.

That has been the problem over at the Pentagon for the last 3 or 4 years, and I think that we in Congress have been talking about that. Now we have had Secretary Cheney step up to the plate—Secretary Carlucci did some of that, too—and really take a look at the longer term. And we would indeed be remiss if we did not fulfill that obligation ourselves, which we have been discussing for a long time.

Senator EXON. Mr. Chairman, could I just add one caveat to your statement?

Chairman NUNN. Of course.

Senator EXON. Gentlemen, this is the first budget in many years that I have seen that comes over in the Pentagon that addresses the hard choices. We certainly are going to take a look at it. We are not going to rubber stamp it. But I think I want to congratulate you, because I hope and I believe that in the end any add-ons or changes that we make will not be add-ons, but they will be cuts in other programs. And I believe, and I hope that we will use as the baseline for that the budget that you have sent us and proceed from there. So you have done a good job.

Chairman NUNN. Senator Gorton.

Senator GORTON. Thank you, Mr. Chairman. I think it is a fascinating and an extremely useful concept to have a hearing on cancelled programs. From what I heard of your statement and that of Senator Warner, I want to express my agreement. I think Senator Exon is entirely correct that there will not be any of these restorations except as a substitution for something else in the judgment of the committee in its own setting of priorities.

In that connection, I do want to say a word on something that I am sure that the Secretary will cover, the decision to cancel the V-22 program. A great deal of attention has been focused on the fact and a number of assertions that the costs associated with that proposed alternative were not included in the initial analysis. Obviously, we will be discussing that here this morning.

I do want to address what I think is an important point which has been lost in the dialogue. The impression has been, and that impression has included myself, that canceling the V-22 will save $25 or $30 billion over a number of years. Obviously that is not the case, because the Department is not canceling the requirement for which the V-22 was designed in the first place. It is proposing an alternative program for helicopters and has included funding for those helicopters in the budget which is before us right now.

In reality I would state that what we are talking about is the difference between what OSD says the V-22 will cost and what it says the alternative program will cost. The perception that it is all or nothing is simply not the case. If we accept OSD's best case of cost comparison, the difference between the V-22 and the alternative is approximately $5 billion over a 20-year period. If we include certain costs which were left out of the alternative proposal, but which apparently will be required, the costs of the two programs may very well be comparable.

So I am not sure whether we are talking about savings at all or, if so, how much. We do seem in my view to be giving up a tremendous combat capability for the 21st century, and I will be most interested to know what the Secretary has to say in that connection.

Chairman NUNN. Thank you very much, Senator Gorton. Senator Dixon and Senator Thurmond have submitted prepared statements which they wish to be made a part of the hearing record.

[The prepared statements follow:]

PREPARED STATEMENT OF SENATOR ALAN J. DIXON

This hearing on program terminations could not be held at a more appropriate time as this committee enters the final stages of deliberations on this year's defense authorization bill.

Because of severe budget constraints, the administration has made difficult decisions that include proposing deep cuts in defense spending and the cancellation of major conventional weapons programs. The administration's plan will continue the modernization of our strategic forces while slowing the modernization of our conventional Active and Reserve/Guard forces. However, by canceling conventional programs we reduce our defense industrial base that is essential in a protracted conflict, and we are forced to rely on the development of new weapon systems—which are often over-budget and delayed.

Such is the case of the F-15E fighter program. By canceling this program, the Air Force will have only one fighter aircraft line open, the F-16 line, until the Air Force begins procuring the advanced tactical fighter in the mid-1990s. The risks inherent in this approach are that we are vulnerable if we become involved in an extended conflict, and that we are relying on the smooth and on-time development of a new aircraft. Furthermore, we also forego improving our theater nuclear force capability that has already declined due to the reductions called for under the INF Treaty.

The risks involved in canceling the Apache attack helicopter program are virtually the same. Again, by canceling the program we lose a warm production base, we have to rely on the development of a new helicopter, and we forego improving a declining capability, in this case, our anti-armor capability. Additionally, seven National Guard/Reserve units will not be modernized if this program is terminated.

Clearly, the decisions to cancel these programs and many others were not easy. The trade-offs involve taking risks that I believe we should thoroughly examine before we accept them. I believe in strong conventional forces and I am troubled by the deep cuts proposed for these forces. The F-15 is undoubtedly the best fighter in the world today and it disturbs me that we will no longer build this plane. I am equally disturbed that we will not continue building the best attack helicopter in the NATO inventory. These weapon systems are outstanding and there is an ongoing requirement to continue building them. We have an opportunity here today to understand the rationale for terminating these programs and I look forward to hearing from our distinguished witnesses.

PREPARED STATEMENT OF SENATOR STROM THURMOND

I join you, Mr. Chairman, in welcoming our distinguished panel. Secretary Atwood, Mr. O'Keefe, I extend to you a special welcome to this your first hearing before the committee since your confirmation. I have great confidence in your ability and wish you the best of luck.

Mr. Chairman, I want to congratulate you for holding this hearing. Secretary Cheney had to make very difficult decisions in a short time and under difficult circumstances to arrive at the $68 billion cuts demanded by the revised budget over the next 5 years. There are questions concerning the impact the termination of such programs as the V-22, the F-14D, and the Apache program will have on the future capabilities of our forces. I trust today's hearing will resolve these doubts.

The Warsaw Pact threat has changed only marginally since the Gorbachev announcements. By all reports their defense industries are still producing combat vehicles at an unabated rate. Faced with these realities, I am concerned over the impact some of these terminations will have on our readiness. I will therefore listen with great attentiveness to today's testimony and trust that my colleagues will do the same. The decisions we will be making in the next several weeks on the fiscal years 1990 and 1991 defense budget will determine our defense capabilities for the coming years.

Thank you Mr. Chairman.

Chairman NUNN. Mr. Atwood, we are ready to hear from you.

STATEMENT OF HON. DONALD J. ATWOOD, DEPUTY SECRETARY OF DEFENSE, ACCOMPANIED BY HON. DAVID S.C. CHU, ASSISTANT SECRETARY OF DEFENSE FOR PROGRAM ANALYSIS AND EVALUATION; AND HON. SEAN O'KEEFE, COMPTROLLER, DEPARTMENT OF DEFENSE

Mr. ATWOOD. Thank you, Mr. Chairman, members of the committee. At your pleasure, I would read in its entirety the introductory remarks that I have.

I appreciate your giving me this opportunity to discuss with you the major programs that were terminated in the Department of Defense's 1991 amended budget and some of the tradeoffs that would have to be considered in order to restore them. From such a discussion, I think you will see that, while the program decisions the Department made were hard ones that involved real losses in military capability, the other available choices are even less attractive. In short, these were tough decisions, but we believe they were the right decisions and we are prepared to defend them vigorously.

In this opening statement I will briefly outline the overall priorities established by Secretary Cheney and followed by the Department in the budget reduction exercise, and then I will explain the reasoning behind our terminating several specific major acquisition programs, relying largely on illustrative programmatic reductions of systems or forces that might have been made instead.

I will conclude by pointing out the necessity for Congress, in reviewing our decisions, to adopt the same long-range perspective that we in the Department employed in making them. You can help us avoid major distortions in our carefully balanced 5-Year Defense Program by refraining from making changes that seem small in fiscal year 1990, but actually commit us to much heavier expenses later on.

First, I would like to set the overall context for this effort, starting by observing that DOD's budget and future programs have been cut repeatedly and heavily over the past 4 years.

For example, after it first appeared as the last year of the fiscal year 1986 to 1990 FYDP in February 1985, the planning figure for 1990 was reduced four times and by 30 percent overall before it was submitted to you as the lead year in the Reagan administration's fiscal years 1990 to 1994 FYDP in January of this year.

The latest round of FYDP program reductions, including the 1990 bipartisan budget agreement undertaken by the Bush administration with Congress, took the DOD program for 1990 to 1994 down by about $64 billion, or another 4 percent overall. This amount had to be taken from a program that had just been scrutinized and trimmed rigorously prior to its submittal last January.

Another critical contextual feature had to do with the status of major acquisition programs in general and with perceptions of how they were being treated. In preceding budget and program reduction efforts, and no less in this most recent one, there has been a tendency for acquisition programs to be "at the margin" and thus relatively more vulnerable to reductions.

This is partly for fact-of-life reasons having to do with testing, schedule slips, and the like. But it also was due to the large increases made to acquisition programs in the early 1980s, when the defense program was growing rapidly. In addition, the general downward pressure on modernization was accompanied by increasing demands from a variety of sources that we make vertical cuts, that is kill a few programs so that the remainder could proceed at economic and stable rates of production. I understand many of you, many Members of Congress, believe this is the correct approach, and we concur with that advice.

PROGRAM PRIORITIES

Within this broad context, Secretary Cheney set some clear priorities for the 1990 to 1994 program reduction exercise. First, he was convinced that the most important element in rebuilding our military strength was the excellence of our military personnel, and he was determined to protect personnel quality. This determination is manifested prominently in the Department's firm commitment to the 3.6 percent military pay raise and to the principle of maintaining equitable compensation in the future.

Second, while willing to accept modest force reductions, the Secretary insisted that remaining conventional forces be fully capable of executing our forward strategy by maintaining a high level of training, readiness, and operational tempo. Proposed cuts in these areas accordingly were staunchly resisted.

Third, Secretary Cheney wanted to provide for adequate strategic deterrence.

And finally, he mandated that we buy more efficiently. To this end, we moved decisively to terminate a number of programs, some of the largest of which I will address shortly, in part so that some $9 billion could remain allocated to efficient procurement, that is, at economic rates and/or multi-year funding of over 30 systems. We also acted to reduce concurrency in some of our more technologically advanced programs.

Under these guidelines, we proceeded to reduce the DOD program by $64 billion. Before making our decisions, we consulted with the Commanders in Chief, the CINCs of our operating commands, the Chairman and Vice Chairman of the Joint Chiefs of Staff, the Secretaries of the military departments, the service Chiefs, and various members of OSD staff.

The major issue process moved along crisply, as it had to meet the deadlines set by the administration and by Congress. But it provided opportunities for all relevant points to be considered fully. The advice of our military leaders was particularly valuable on matters having to do with strategy, tactics, and operations. The big programmatic issues were reviewed and adjudicated largely on a 5-year basis, although in some cases, like the V-22, we also looked carefully at costs falling beyond fiscal year 1994.

PROGRAM TERMINATIONS AND ILLUSTRATIVE TRADEOFFS

I will discuss both our program terminations and illustrative alternatives to them in 5-year terms. I will use aggregate 5-year costs in those comparisons because we were not trying to balance on a year-to-year basis in examining single issues or tradeoffs. Nor will total tradeoff dollar figures balance in all instances, because we were deliberating in a still broader context, that is making multiple reductions to reach much larger overall targets in each fiscal year.

I must emphasize that the tradeoffs I will outline for you are indeed illustrative. The Department of Defense supports the President's budget as now amended. Also, while many of these alternatives or variations of them were treated in our deliberations, they were not necessarily compared or traded off directly against one another.

ARMY AVIATION—AH-64 AND AHIP

In the important mission area of Army aviation, we chose to reduce production of the AH-64 Apache helicopter from 72 to 66 in both fiscal years 1990 and 1991 and to terminate it after that. We also terminated the AHIP program to modernize the Army's OH-58 helicopters at roughly its midpoint.

These actions collectively saved $3.6 billion. They resulted in a 17 percent reduction in previously programmed AH-64 inventory—force structure was trimmed commensurately, I might add—and a 45 percent cut in the AHIP numbers. The 168 canceled AHIPs would have provided enhanced reconnaissance to the Army's field commanders pending fielding of the LHX. The 207 AHIPs now procured have been or will be fielded in field artillery aerial observation or reconnaissance roles.

A major alternative to these terminations is cancellation of the LHX program, which is designed to cover a wide range of light helicopter missions with a single, modern aircraft when produced in numbers in the late 1990s. LHX cancellation would have saved us $2.8 billion over the 5-year period.

IMPROVED RECOVERY VEHICLE (IRV)

We also terminated the Army's Improved Recovery Vehicle (IRV) program, which had experienced testing problems and for which existing tracked vehicles provide feasible alternatives. The last Reagan FYDP budget program included $311 million for 215 IRVs. The total proposed program of 291 IRVs was insufficient to equip all Active Forces, let alone equip the Reserves or provide war reserve stocks.

Alternatively, one could generate about $300 million by delaying for 3 years the modification of our M-1 tank inventory with the Block 2 improvements, which I believe are needed to counter projected armor improvements in Warsaw Pact tanks. The basic judgment here is that it is preferable to avoid damage to our tanks in the first place than to spend heavily on pulling a few more damaged tanks from battlefields that we might not control for long.

AIR FORCE TACAIR—F-15E

The major program termination in the Air Force was of the F-15E long-range interdiction aircraft, which some believe would be of dubious survivability when operated against future air defenses. While preserving enough F-15Es to cover minimum requirements in Europe and the Pacific, cancellation of the 1992 to 1994 buys saved us $3 billion. This is about what we could save by reducing F-16 procurement from the programmed 150 to 115 per year. Such a decrease would also eliminate more than twice as many aircraft, with future consequences in the form of reduced force structure, increased average age of aircraft, or both.

Alternatively, we would save almost $3 billion by cutting out four tactical air wings, an immediate structural reduction of over 10 percent. This did not seem attractive at that time, at the time we were making our program reduction decisions, nor does it now, pending agreement with the Warsaw Pact on composite force reductions.

NAVAL AVIATION—F-14D

Relative to naval aviation, by canceling new production of F-14D aircraft after fiscal year 1989, we saved $2.4 billion over the period from 1990 to 1994, while keeping intact the higher leverage program to modify 400 existing F-14s to the D configuration. The resulting loss of 60 aircraft will cause some inventory shortages in the late 1990s.

We could save about the same amount through cutting F/A-18 production from 66 to 45 per year, a loss of 105 aircraft that are scheduled to go to the Marines. This equates to a 20- to 25-percent cut in Marine Corps fighter/attack aircraft capability, on which Marine ground forces rely heavily for support once ashore.

Alternatively, one could reduce the Navy's carrier-based tactical air force structure. As you know, currently we plan to operate 14 deployable carriers and 15 air wings over the period 1990 to 1994. About $2.5 billion could be saved by retiring the *Enterprise* early, thus foregoing its expensive overhaul and saving some operating costs, and eliminating an active carrier air wing. Combined with Secretary Cheney's recent decision to eliminate one deployable carrier, this would equate to a total reduction of two deployable carriers from the 15 programmed in the last Reagan FYDP, an aggregate cut of 13 percent.

MARINE CORPS—V-22

Cancellation of the V-22 and substitution of an all-helicopter force—assuming dual-sling operation—results in acknowledged deficiencies in the Marine Corps airborne and amphibious assault mission and the long-range special operations forces exfiltration mission. But this decision also saved us $7.8 billion over the period from 1990 to 1994, 12 percent of our overall reduction target.

One alternative that would yield about half of the funds required to fully reinstate the V-22 would be to cut our amphibious lift objective from the MEF plus MEB level established in 1981 to a single Marine expeditionary force. This could be done by retiring eight major amphibious ships and canceling four new ships. Adding in the retirement of two battleships, a key mission of which is the major caliber gunfire support of amphibious landings, and the retirement of the *Enterprise* with an active air wing as discussed previously, would produce a total of about $7 billion, equal to 90 percent of the funds needed to restore the V-22.

In grossly simplifed form, this makes the V-22s restoral equal to roughly a one-quarter decrease in the amphibious lift plus a halving of the battleship force and a 7 percent decrease in the deployable carrier force. Were the V–22 to be restored from programs solely connected with Marine Corps missions, it would require drawing amphibious shipping down further, to the level of two MEBs, and also terminating the AV–8B program.

The larger amphibious lift reduction would entail retiring 23 more amphibious ships and not buying an additional LHD–1 and three LCACs. Total savings would be $6.6 billion. The resulting amphibious force would not have a division-size assault capability, but would provide a brigade-size assault option in both the Atlantic and Pacific.

Terminating the AV–8B program at the end of fiscal year 1989 would cut the planned AV–8B inventory by 17 percent and Marine Corps tacair overall by about 10 percent.

SUMMARY

In summary, I could continue to present and discuss possible program tradeoffs for some time. The list of alternatives just to these six terminated programs is obviously lengthy. But I prefer simply to add the cautionary note I mentioned earlier on how I think you should approach the question of program restorals and then summarize quickly and get on to your questions.

As Congress makes its decision on whether to revive the programs we cut, it is critical that you take a long term perspective rather than focus solely on fiscal year 1990. Our decisions on terminations were not made solely or even primarily for their impact in 1990. If restored in 1990, major programs will create significant unprogrammed requirements for 1991 through 1994 and beyond. In both budget authority and outlay terms, restoration of programs in 1990 will greatly exacerbate the difficulty we can anticipate in preserving a balanced, effective defense program at the constrained levels envisioned in the future.

In this connection, I hope that Congress will not allow the current disagreement over the 1990 outlay estimates to distort its consideration of program termination issues. The CBO has estimated that DOD outlays will exceed the level in the budget agreement by $3.8 billion.

Some in Congress may believe that terminated programs can be revived painlessly, on the premise that it would be necessary to make sizable reductions in personnel and operating accounts to reduce outlays and the budget authority freed up by those reductions can be applied to relatively slow-spending acquisition programs. In my view, this approach would be the wrong answer to a problem that need not, and in fact does not, exist. The Department continues to believe that outlays cannot be estimated either by DOD or CBO within 1 percent accuracy. It is disconcerting that estimates as tenuous as these could become the basis for major realignment of the Nation's defense programs and priorities.

We strongly believe that the so-called budget authority outlay mismatch problem can be resolved without restructuring the defense program. It would be most ironic and unfortunate if Congress were to solve this potentially nonexistent problem by taking steps in 1990 that would add billions to budget authority and outlays in future years, thus adding to our long-term deficit problem.

In summary, following major reductions during the second Reagan term, DOD confronted another 4 percent program cut early this year, and at the same time there was growing criticism to the effect that Defense had been avoiding the pain of budgetary reductions by stretching all of its programs rather than canceling a few big ones.

Without judging the validity of such criticism of DOD's past performance, I would like to point out that in the so-called Bush reductions DOD saved 27 percent of its overall fiscal objective by canceling outright or stopping earlier than planned the six big programs I have discussed. Looking at the acquisition sector alone—R&D, procurement, and military construction—these six programs and our three other large terminations account for 40 percent of the total decrease.

In my opinion, we have come up with a well-balanced program, one that accords with Secretary Cheney's priorities and meets squarely one of the primary complaints about previous defense budget reduction proposals, that is they avoided vertical cuts in favor of stretch-outs. We believe that a solid case can be made, at the fiscal level currently mandated for the Department, for the particular set of program terminations we propose. With that, I am now ready to answer questions.

Chairman NUNN. Thank you very much, Mr. Atwood, for a statement which clearly points out the reasoning that went into your own deliberations and also points out some of the tough alternatives if we start looking around for tradeoffs by way of hypothetical example. We appreciate your testimony this morning. Mr. Chu or Mr. O'Keefe, do you have a statement you want to make this morning?

[No response.]

BUDGET OUTLAYS

I have several lines of questioning. But Mr. Atwood, you invited one question at the bottom of page 9, when you say:

> We strongly believe that the so-called budget authority outlay mismatch problem can be resolved without restructuring the defense program.

You want to go ahead and tell us how? We have $3.8 billion the Congressional Budget Office says we have to find a way to save in outlays. How are we going to do that without making major changes in the defense budget that is submitted by the Department of Defense?

Mr. ATWOOD. I would like to, if I may, rely on some past experience. This is not an unusual situation to exist either in the Department or in the industrial field. Obviously, when one talks first of all about a multi-year program, the close-in years afford a considerable degree of accuracy which one cannot anticipate in the years following, and this is a situation that has existed within DOD for some time.

When one makes a budget, however, for a year at a time, it is even then more difficult to anticipate fully cash flow, as I think we are seeing this year, in which our budget as measured differs from the budget outlay. One percent amounts to a tremendous amount of money, no matter how you look at it. On the other hand, 1 percent is a fairly small portion of the total budget.

One of the things that has been looked at is that the Secretary decided to pay military personnel on the last day of fiscal year 1989 instead of the first day of fiscal year 1990. This has the direct effect of shifting $2.9 billion in outlays from 1990 back to 1989. Budget committees and CBO are balking at scoring these changes, arguing that such a change would constitute gimmickry. That is not always the case, that they constitute gimmickry, because in fact that is not an unusual thing to do.

Assuming the CBO is compelled to rescore 1990 outlays in light of the pay date shift, the scope of the outlay problem is reduced to about $900 million. We are working with the committee to develop financing alternatives to avoid wholesale program changes. We are proposing to the committees that the financing of the installation of new equipment, and perhaps modifications of aircraft, vehicles, ships, and weapons systems, could be shifted from the operating accounts to the investment accounts. This is a conceptually sound move which would have the effect, using CBO's scoring methods, of reducing the outlay by just over $1 billion. Absent financing alternatives, the committees could be compelled to reverse many of the program terminations since these investment programs require very little outlays in the budget year.

Chairman NUNN. In other words, what you are saying is that probably the natural course and the natural incentive and pressure would be to restore some of these programs that will cost a lot of money in the years ahead and not a lot of money this year, to meet this outlay total, which would make our deficit problem overall worse, but make the scorekeeping come out right?

Mr. ATWOOD. It would make the scorekeeping come out right, but it would exacerbate the problem in the years ahead and in fact might exacerbate some of the readiness issues that we are concerned about today.

Chairman NUNN. What you are suggesting is that the pay date change saves $2.9 billion?

Mr. ATWOOD. Yes, sir.

Chairman NUNN. Was that done by Secretary Cheney as a budget measure to meet the budget outlays, or was it done for other reasons? What was the reason? Was it a gimmick?

Mr. ATWOOD. May I just read something to you? This is a memo that was sent to the Secretaries of the Army, Navy, and Air Force:

> To avoid financial hardship for our soldiers, sailors, and airmen, I am directing that the provisions of 37 U.S.C. 1006 be invoked to advance the October 1 payday. The October 1 payday was not advanced last year when it fell on a Saturday. Even that small delay in payment was an inconvenience to many service members and for some a financial hardship. This year the October 1 payday will fall on a Sunday and, unless the payday is advanced, many of your personnel will not receive their pay until Monday, October 2nd. Therefore, you should take the necessary actions to advance the military payday to Friday, September 29th, 1989.

So it was done with the interest in mind of the servicemen who have a financial hardship problem, and I can attest that they are not so highly paid that that is an insignificant problem.

Chairman NUNN. What is the date of that?

Mr. ATWOOD. May 24.

Chairman **Nunn**. Is the Department of Defense asking this committee and the other committees to basically take that into account in our overall budget numbers?

Mr. **Atwood**. Yes.

Chairman **Nunn**. Then would that necessitate as you understand it an actual change in the law, or do we simply take it into account? Maybe Mr. O'Keefe could speak to that. What is the deal with the appropriators versus the authorizers?

Mr. **O'Keefe**. My understanding, sir, is that it would not require a change in the law per se. It is an administrative procedure. Under the terms of 37 U.S.C. 1006, as the Secretary just mentioned, that particular administrative change is now in effect. It is now a question of whether the Congressional Budget Office will recognize that fiscal reality, that $2.9 billion will accrue in fiscal year 1989 as opposed to fiscal year 1990. So it is simply a question of whether or not the scorekeeping procedures fall in line with the administrative procedure permissible by the law is recognized.

Chairman **Nunn**. What that has the effect of doing, if I understand it, is increasing this year's deficit and decreasing next year's deficit based on the scorekeeping, that is decreasing the fiscal year 1990 deficit, the one that is coming. But by doing this, actually the outlays go up in this fiscal year and therefore this year's deficit is going up, is that right?

Mr. **O'Keefe**. Without passing judgment on the question of whether it affects the deficit or not, it definitely does affect the expenditure rate which would occur in fiscal year 1989 as opposed to 1990, and that is absolutely a fact.

Chairman **Nunn**. How could it not affect the deficit?

Mr. **O'Keefe**. Based on the August 15 snapshot that the Congressional Budget Office will be taking in accord with the terms of Gramm-Rudman-Hollings, it is premature to determine what the forecast of revenue will be at this time.

Chairman **Nunn**. You mean it depends on other things whether the overall deficit goes up?

Mr. **O'Keefe**. Yes, sir.

Chairman **Nunn**. But it certainly makes the deficit $2.9 billion higher than it otherwise would be in fiscal year 1989, right?

Mr. **O'Keefe**. Potentially.

Chairman **Nunn**. There is no potential about it.

Mr. **Atwood**. It makes the cash flow worse.

Mr. **O'Keefe**. If the revenues have gone up by $2.9 billion——

Chairman **Nunn**. Well, the deficit may have gone down, but it is still $2.9 billion higher than it would be if you did not do this, correct?

Mr. **O'Keefe**. Yes, for fiscal year 1989.

Chairman **Nunn**. For 1989. Thank you.

My time has expired. Senator Gorton.

V-22 AND H-53/H-60 ANALYSIS

Senator **Gorton**. Mr. Secretary, I understand that a major factor in OSD's decision to terminate the V-22 in favor of a mix of H-53 and H-60 helicopters was based on the use of a discounted dollars cash flow analysis. While the use of discounted dollars analysis is suspect in the public sector because it ignores technology spinoffs, balance of trade issues, commercial benefits, multi-mission service applications, and effectiveness, it is a fairly common business exercise. Given that the methodology is used, however, it should be applied evenhandedly. It appears as though that may not have been the case with the V-22 and the H-53/H-60 analysis. The cost figures for the H-53/H-60 mix were based on 1986 DSARC-2 projections, not on available actual fiscal year 1988 figures. I understand that the fiscal year 1988 actuals for the H-53 and H-60 are higher than the 1986 projections. Why were not the actual costs used?

Mr. ATWOOD. I think I will ask Mr. Chu to address that.

Mr. CHU. The so-called decision coordinating paper costs were used by agreement between the Marine Corps and OSD, because it provided a common baseline for considering all options, including issues of what the V-22 operating costs would be, et cetera. It is the case that you have conflicting claims as to what actual CH-53 and H-60 costs would be, some lower, some higher than those numbers. Those numbers are in the midrange of the estimates that various parties are putting forward.

Senator GORTON. I am not sure I understand that last part of your answer.

Mr. CHU. You have varying estimates as to what the specific airframe would cost, depending upon what equipment you would put aboard the airframe, as well as depending upon what you assume will be bid responses when you actually go to negotiate a contract.

The decision which everyone agreed to in terms of debating the issue in front of the Secretary was to use decision coordinating paper costs because that was the last major milestone for the program. No one believed that the costs were necessarily firm—particularly the procurement cost could be entirely different from that perspective, with some qualifications which I will not get into on the V-22 regarding the delay of the program.

The DCP provided a common baseline, which everyone agreed to use as the basis for the debate. No one believes they are significantly out of line on the CH-53 and the H-60 with actual costs. Now, there is a dispute as to how much avionics the Marine Corps would like aboard the CH-53 and the H-60. That is a separate matter.

Senator GORTON. The OSD analysis is based on V-22 procurement completed in calendar year 2002. The H-53/H-60 procurement takes until 2006. The longer delivery period for the H-53/H-60 creates a built-in bias against the V-22, even though the earlier V-22 fielding gives us earlier combat capability. What would be the impact on the findings if the alternatives were delivered in equal timeframes?

Mr. CHU. We have done those calculations. It would not change the present discounted value numbers enough to reverse the decision.

Senator GORTON. How much would it change them?

Mr. CHU. I can furnish those. I do not have them with me. We did do those numbers to make sure that was not the problem.

[The information follows:]

The overall impact of procuring the V-22 and the all-helicopter alternatives in the same time period as V-22 (through fiscal year 2002) is negligible. The overall ranking of the alternatives for both constant fiscal year 1988 dollars and discounted constant fiscal year 1988 dollars does not change.

For the single sling all-helicopter alternative, the life cycle cost in constant fiscal year 1988 dollars would be reduced 2 percent from $34,132 million to $33,404 million. Similarly, for the double sling all-helicopter alternative, the life cycle cost in constant fiscal year 1988 dollars would be reduced less than 1 percent from $23,414 million to $23,210 million. The double sling all-helicopter alternative costs did not change as much because, in this alternative, the CH-53Es were already procured before fiscal year 2002 and the CH-60s were only procured through 2003.

In discounted constant 1988 dollars, the single sling all-helicopter alternative life cycle costs increased 10 percent from $10,420 million to $11,469 million. On the other hand, the double sling all-helicopter alternative life cycle cost increased by only one-half of 1 percent, from $8,415 million to $8,461 million. Again, the double sling all-helicopter alternative costs did not change as much because, in this alternative, the CH-53Es were already procured before fiscal year 2002 and the CH-60s were only procured through fiscal year 2003.

Senator GORTON. The OSD analysis uses a discount rate of 10 percent. The GAO has stated that a discount rate of 5 percent would be more appropriate, given the current rate of inflation and private investment rates of return. What would be the impact on the analysis of using a GAO-recommended 5 percent?

Mr. CHU. We have calculated what the breakeven rate would be for the one situation where there is some hope for the V-22 option to come out as cheaper on a discounted basis, and it is about 2½ percent. So the GAO number would not change the conclusion in the end.

Senator GORTON. But it would change the differences?

Mr. CHU. It would change the magnitude. Now, I should stress that the 10 percent number is the Department's regulation on this matter and derives from OMB regulations on the subject. So we are supposed to be using 10 percent.

Senator GORTON. Thank you, Mr. Chairman. I will have some more questions on this subject which I will submit in writing.

Chairman NUNN. We will have at least two rounds this morning if you want to ask them later.

Senator GORTON. I am not able to stay and finish it. Thank you.

Chairman NUNN. Thank you. Senator Exon.

MOVING BACK PAY DATE

Senator EXON. Mr. Chairman, thank you very much. Once again, gentlemen, I am very glad you are here. I have said some highly complimentary things, I think, about what you have done and what you are trying to do. There is one thing that I would like to take sharp disagreement with you on. That is that it is not policy, but it is a fact that, no matter what kind of a spin you put on it, it is gimmickry to move back the pay date.

The troops might appreciate that, but I suspect in all candor that that was not the reason that it was done. That was the excuse for it, and it massaged the budget gimmickry. Budget-wise, this is gimmickry as certain patent ailments or cures for ailments such as Little Liver Pills and Hadecol and snake oil from the standpoint of sound budgeting.

So I hope that that request is not included in this committee's recommendations or in our bill. If it is done, it must be done elsewhere. I suppose, though, that this is one more of the massaging that had to be done to fit the necessary foot into the shoe of the budget, and from that standpoint you may be doing the only thing. But I think it is proper to label it gimmickry and I do so once again.

V-22 OSPREY

Let us get into the matter of the V-22 Osprey. Now, I take the devil's advocate position on this because I do think that we have the responsibility to look into some of these things. I suspect that you in the Department did look into this, Mr. Atwood, in great detail, but I am not sure that that has been properly spelled out. So I want to ask you first about the adequacy of data for the decision to eliminate this program.

It has been stated that the decision to eliminate the Osprey was made with inadequate data. I assume that you are in a position to refute that and I want to give you that opportunity. What is the basis for this claim? What additional data in your opinion could have been reviewed in making that decision?

I am trying to put this all in perspective. I think we have to talk about the relevance of the mission of the Marine Corps, which of course is very important. If we bought the Osprey, would that reflect additional support for existing missions of the Marines or, on the other hand, is it support for the present mission of the Marines that we would expect them to carry out? I am trying to get some of the rationale for this decision.

Mr. **Atwood**. I think those are fair questions. I would like to respectfully come back to your comment, if I might.

Senator **Exon**. Certainly.

Mr. **Atwood**. I do not mean to be argumentative about it, but it is a fairly common practice outside of the Government, in commercial firms, to advance the paydays to their employees to take care of a holiday which is coming or in other words if people are going on a holiday over Christmas or Thanksgiving and it coincides with a payday to speed up that payday. And it is also a common practice when paydays fall on a Sunday to try to advance that to Friday. So the paying of people I hope is not a gimmick. The only thing that I would say to you is how it is kept in terms of the books is a fair accusation. But I do not think our paying our people before a Sunday or before a holiday is really a gimmick.

Senator **Exon**. Mr. Atwood, I would simply say to you that, as a former employer and a businessman, not in a great big corporation but in a very little corporation, I recognize that. It is true that we as business people do that from time to time. There is nothing wrong with that.

The mechanics that you have gone through have been well established by Government in the past. Almost every year we advance deficiency payments in the agricultural sector back into the previous year because that does not hurt, "hurt," when you are scoring under Gramm-Rudman-Hollings. But it is bookkeeping gimmickry at best, and maybe we can leave it at that.

Mr. **Atwood**. I will accept that. Let me address your other question briefly, and then I will ask Mr. Chu to add some details to that.

One of the most important things we looked at is the utilization of the V-22 and the mission of the Marines and when and how we would have used it in the past. And for that we consulted with the Joint Chiefs and particularly with the Chairman of the Joint Chiefs, and I think he has been fairly outspoken that it is not a common occurrence that it would have been used in the past. And my understanding is that it is something like once in the last 45 years that there was such an occurrence.

Now, I hasten to add, I hope we never have to use a nuclear bomber and that does not prevent us from going ahead with development of nuclear weapons. I understand that. On the other hand, in the Marine mission, although it can be painted as a very important one, it is not something that occurs at any large significant portion of time. That is one concept that we took.

And the second concept is, as you well know, we were looking for some major programs and approached those that we felt were the least cost effective based on the mission, on the number of times they would be used, and on the amount of savings that could be made in 1990 and the FYDP. And this is how we arrived at that.

Now, I think your concern was that certain things were not taken into consideration or were not consulted, and I think I might ask David Chu just to comment on that.

Mr. CHU. I think it is a situation where, as I said to Senator Gorton, everyone agreed on the numbers. What they disagreed on were what those numbers meant. It is not a matter that the data were inadequate or lacking or absent from the debate. In fact, we had an extensive exchange between the OSD and the Marine Corps to get a set of numbers, and that is why we used the decision coordinating paper numbers, so that we could all agree that that was a reasonable set for the purpose of making this decision.

Where people's views differ was on which options, using those numbers, ought to be the ones to be pursued; specifically, how many helicopters to buy to replace the V-22; and subsidiary questions of how much avionics to put on the helicopters if they were bought, and should provision be made for the fact that V-22 has a self-deployment capability and helicopters do not.

The basic answer was "no," at least in the OSD perception, because these aircraft, whatever they are, are basically going to go to war on amphibious ships, not via some kind of strategic airlift. But of course, if you wish to take the position that strategic airlift might be used and you would have to buy more if you bought more helicopters, then you can run up the bill and get a very big number to add to the basic comparison between the V-22 and the helicopter options.

In this debate I think everyone acknowledged that if you pick the helicopter solution you are picking the lesser solution. It is a less capable solution, but it was a marginal capability. As Mr. Atwood indicated, the Chairman felt it was one that, when one looked at the way we had used military forces in the last 40 years or so, was a risk we could take in this budget environment, that there was not enough money to cover this added capability. We would have liked to have had that capability. It has been in the Department's budget for several years. But it was not something we could any longer, at least in our judgment, afford.

Senator EXON. Thank you. My time is up, Mr. Chairman. I wanted to get into the F-14s, but I did not ask about it. I will get into it in the second round. Thank you very much.

Chairman NUNN. Thank you, Senator Exon. I believe Senator Gore is next.

Senator GORE. Thank you very much, Mr. Chairman. Welcome to our witnesses. I am delighted to have a chance to have an interchange with you.

F-14

Senator Exon, I am, in fact, going to pick up on the subject that you just mentioned, the F-14. And let me preface my comments and questions by saying that my home State is not involved in this, I do not have an interest that is anything related to employment or whatever. It is just an issue that I have looked at carefully and I have some concerns about it, because I know that the Department of Defense has spent a lot of money on many occasions to create competition and a second source for supplying critical items.

I am concerned that we may be moving in the opposite direction with this. Now, it may not be possible to change it. I do not know. We are looking at exactly what is within the realm of the possible. But let me just ask you about the implications.

The proposed budget before the committee terminates F-14D production, incurring future shortfalls, to obtain the NATF. It terminates the EA-6B production, exacerbating current shortfalls, to obtain the ATF. It does not include the A-6 upgrade program, exacerbating existing shortfalls, to obtain the A-12. And it banks heavily on the rapid introduction of Stealth technology into the naval inventory.

Is this an all-your-eggs-in-one-basket approach? It seems to me that the preliminary estimates indicate that the unit costs of the new aircraft may be two to three times the unit cost of the existing aircraft, and I am wondering if we as a Nation can afford all of those new programs late in the coming decade. So my first question is, can you allay these fears that the budget decisions have considered the Navy's reduced war-fighting capability until we can develop and afford all of these new, high-cost items?

Mr. ATWOOD. I do not know that I will be able to allay everyone's fears in that regard, because clearly it is a question of judgment based on the facts that become available.

In the case of the F-14, it was a situation in which we felt that, although there are plenty of F-14s now, as you know, in the mid-1990s there would be a small shortage of F-14s based on the carrier wings that we are talking about. On the other hand, the oncoming version, Navy version, of the ATF provides a replacement for that as it comes on, as it comes into being. And second, of course, we did not cancel the upgrade of the present F-14s to the D configuration so that program continues.

Senator GORE. Well, is that going to be competed, the F-14D remanufacturing program? Vice Admiral Wilkinson stated that that might also be competed.

Mr. ATWOOD. Obviously, everything we have is subject to competition. On the other hand, when you have a supplier who has had such a history with it, the opportunity for a second source to come in and provide meaningful competition on that number of aircraft would be very limited, I would think.

Senator **Gore**. Well, I mean, I think it depends. Grumman has stated publicly that, if they lose these other programs that I mentioned, then they will virtually be eliminated as a competitor for new naval aircraft programs. What happens to the rest of that company's programs without the F-14D production and the remanufacture? What would the cost impact be to the E-2C and the EA-6B improvement program?

Mr. **Atwood**. I am sorry, I was answering the wrong question. I was answering the question on the remanufacture of the F-14s to the D configuration.

Senator **Gore**. Right.

E-2C

Mr. **Atwood**. Now you are talking about the E-2C. That is a different matter and, depending upon the stability and financial status of Grumman as a result of this cancellation, obviously we would have to take a look at it. On the other hand, I have confidence in Grumman, having worked with them both as a subcontractor and an associate contractor in the past, that their management is very capable of turning that company around.

Senator **Gore**. Well, does this proposal effectively establish a single aircraft company for development of future naval carrier-suitable aircraft?

Mr. **Atwood**. I think not. I think that there are ample airframe manufacturers for the Navy who are currently working on Navy programs, that it does not eliminate the sole source for the Navy programs. McDonnell Douglas is working with General Dynamics, McDonnell Douglas is working with Boeing and are in manufacture now for Navy aircraft.

I might add a comment, because it was not long ago I was on the other side of the fence arguing, when the two contractors on the main battle tank were downsized to one contractor and I felt that that would be a disaster, to have one source for tanks, and argued it vociferously. Fortunately for the country I was dead wrong. That one contractor has proven to be a viable contractor, a responsible contractor, and I do not think anyone would say that the M-1 is anything but a successful program.

Senator **Gore**. Well, I hope we are not repeating a mistake which history has taught us is a costly mistake. I hope we are not effectively driving Grumman out of the future aircraft business. I appreciate the chance to explore some of these questions with you.

As I indicated at the outset, everyone understands the constraints that the Department is under, the constraints the committee is under. But boy, there are some costs that may not be fully measured in some of these decisions, and this is one which I think needs some attention and explanation. I appreciate the chance. My time has expired. Thank you very much.

Senator **Exon** [presiding]. Thank you, Senator Gore. Senator Levin.

Senator **Levin**. Thank you, Mr. Chairman. Let me join you and our colleagues in welcoming our witnesses this morning.

SOVIET CONVENTIONAL SUPERIORITY

Mr. Atwood, Secretary Cheney testified in April that the Soviets have overwhelming conventional superiority, and in other testimony before this committee Admiral Crowe testified that the way to really diminish the prospect of nuclear war is to improve that conventional capability. We have had a great deal of testimony that we have and will continue to have a robust nuclear deterrent. This is in contrast to the conventional deficiencies which we already have.

When we look at the budget proposal we see a proposal to proceed with two new mobile ICBMs that together are going to cost us over $400 billion. A reasonable military case can be made that we need one. I do not happen to share that conclusion, but at least you can make a case that we need one new mobile ICBM. But the administration proposes two of them.

At the same time, we have conventional inferiority, weaknesses, and deficiencies in just about everybody's view. And the proposal that we get is to either cut or eliminate some very significant programs on the conventional side, including Apache, Blackhawk, F-14, V-22, F-15, F-16, F-18, and E-2C. And we are either stretching out or eliminating the following munitions: Hellfire, Maverick, TOW, HAARM, Phoenix, Stinger, and Standard missile.

Now, that contrast does not make sense to me, I must tell you. I see conventional deficiencies here which are going to increase and I see robust nuclear deterrence over here which we are going to make more redundant. Can you tell us, how do you justify proposing two new mobile ICBMs when we are cutting into the conventional systems as you have proposed?

Mr. **Atwood**. That is a fairly broad subject and I will attempt to trace it from the conventional forces and what we are doing on up to the——

ICBMS

Senator **Levin**. Just focus on why two mobile ICBMs, if you would. We arguably need one new ICBM, not two. At the same time we are making what I think you would agree are significant cuts in conventional capability. Would you say that we are going to pay a price for those cuts?

Mr. **Atwood**. Surely.

Senator **Levin**. And we need that equipment that I described. So why two new ICBMs under those circumstances?

Mr. **Atwood**. Number one, they are not that major in 1990 and in the FYDP as far as the impact is concerned on the budget constraint that we are under today. But more importantly, they are in direct response to a capability that the Soviets have, and we are now entering, we hope, successful START negotiations. We hope that we will be able to do in START what apparently we have been able to do in the conventional summit meeting on conventional weapons, and hope to get into our negotiations there.

Yet when we talk about the strategic arms and we talk about a rail mobile ICBM, MIRV'ed, or a single warhead Small ICBM, road mobile ICBM, then in fact we are considerably behind where the Soviets are today. And it makes a very difficult position for us in any kind of negotiations. And if they are not successful and we are not to go ahead with those, we would be in a very difficult position from a deterrent capability.

Senator LEVIN. Is it not true that the Defense Department recommended one system and that was the rail mobile MX, and did not recommend Midgetman to the White House?

Mr. ATWOOD. They recommended that we go ahead with the 50 Peacekeepers on the rail mobilization, however, in discussions within the executive branch, we decided to allocate a small amount of money to the Small ICBM, the road mobile ICBM.

Senator LEVIN. But that was not the Defense Department's original proposal, as I understand it, is that correct?

Mr. ATWOOD. Well, originally I think you will find that there were many varied opinions within the Defense Department.

Senator LEVIN. As I understand it, it was not the Defense Department's proposal to proceed with the Midgetman. Is that correct?

Mr. ATWOOD. At one point, that is correct. It is the Department's position to go ahead.

Senator LEVIN. Now it is, but that was not the Defense Department's preference, is that correct?

Mr. ATWOOD. That is correct, at one time.

Senator LEVIN. The critical time when you made your proposal to the White House. I mean, until you got White House guidance on this, purely in terms of the Defense Department's preference, it was not the Defense Department's preference, as I understand it?

Mr. ATWOOD. It was not a question of guidance so much as it was of continuing discussion with the NSC, and at that point is when we went——

Senator LEVIN. Well, at what point was it that it was not the Defense Department's preference not to proceed with two systems, but only one?

Mr. ATWOOD. When it first went through the Defense Resources Board.

APACHE HELICOPTER

Senator LEVIN. Okay. On the Apache helicopter issue, the current budget request calls for termination of the Apache after 1991. We authorized a multi-year procurement for 4 years last year. The proposal represents a departure from that. As I understand it, the Apache termination is based on an argument that we should provide funds for the LHX helicopter, which has an initial operating capability of 1997. Two questions on the Apache: Will the termination of the Apache not result in the loss of a warm production line for U.S. attack helicopters until the LHX achieves its IOC?; and will there not be a gap there in a warm production line?

Mr. ATWOOD. There will be a gap. But I would like to comment on the decision and the process we went through on the LHX and on the AHIP versus the LHX. This was done with considerable consultation with the Army and with the service Secretary as to the desirability of continuing all three programs—the Apache, the AHIP, and the LHX. The service, the Army, came down hard against any cancellation of the LHX feeling that that was the long-range future for them.

Senator LEVIN. My time is up. Thank you, Secretary Atwood.

Chairman NUNN. Thank you, Senator Levin. We will start a second round.

B-2

Mr. Atwood, we have the B-2 question that is going to be very much a part of our debate both in the committee and on the floor this year, and I think there will be all sorts of temptations to take the B-2 money and to restore some of the other programs that have been cut with that money. The question is really going to hinge on whether the Department of Defense can assure Congress that that program is technically viable, that it is going to be properly managed, and that you are going to do something about controlling the costs. Could you respond to the criticism on both cost and management of the B-2 program?

Mr. ATWOOD. I would be pleased to, Mr. Chairman. As you know, when we first submitted the budget Secretary Cheney said that there had been some lack of full understanding of what the cost structure would be and what the viability of the B-2 program would be and that he had ordered a full review of the B-2 program. That has been ongoing and in fact we have had a Defense Acquisition Board meeting on that subject.

Secretary Cheney and the Secretary of the Air Force and I visited the manufacturing operation of the B-2. We spent a day out there, both at the manufacturing operations and out at Palmdale, looking at the tests and looking at the first model. One of the things that I would like to point out is some of the criticisms and concerns we had and what we found. Number one, we wanted to make sure in our own minds that the mission of the B-2 still remained a vital mission for the air-breathing portion of our triad. And we compared its mission today against its ability to perform it against what we had set out a number of years ago and in relation to the B-1. We remain convinced that the B-2 is a very vital part of the triad and that in fact its penetrability in the increased air defense situations that exist in the Soviet Union make it even more mandatory than ever.

In particular, we asked the Defense Science Board to give us a review of their analysis and John Foster in the Defense Science Board did just that and came away with a clear signal that as a deterrent weapon alone the B-2 was essential. So that set aside, at least for the moment, that very vital concern that we had, that possibly its usefulness was not going to be there.

So we took a look then at the technical problems that exist or could exist, and one of the largest is always the fact that you are using new composites to get a low silhouette. And from that standpoint, we even put a factor on that it might degrade. We came away again with the Defense Science Board and with our own analysis that in fact that was not a technical problem. The composite testing which they have done both in the manufacturing of it—and the concern I had was on low-cycle fatigue, the fact that you are now dealing with composites instead of metals in the structures. They have done a tremendous amount of testing and evaluation of the low-cycle fatigue problem.

Another area that we looked at was the engine, and of course this is a General Electric engine. It is a mature engine. It is not one in which we are starting from scratch.

And we feel that from a technical standpoint things of that nature are fairly low risk. Now, there are perhaps one or two minor areas, minor meaning I would like to discuss them in closed session rather than in an open session, but they are not show-stoppers. They are within the range of practicality.

We then looked at the manufacturing capability. There have been some concerns that the management out there was not doing an effective job at quality control or automation. And I have to tell you that, from my own standpoint in reviewing it, the degree of quality control, the emphasis that they are putting on training of people, the exercise that they are going through with their people, gives me great confidence in that. Obviously, when you are making one a month or going to make at a maximum three a month you do not automate the way you do if you are building a truck at 60 an hour. But the degree of automation they are using in order to do the quality is entirely satisfactory. So that I feel from a mission, from a technical standpoint, from their ability to manufacture, both from a quality and the degree of automation, that it is a very positive picture.

We then looked at the costs and reviewed in considerable detail the costs, the extrapolation of the cost which we have from the test data they have into what is available and held for engineering changes. And we also looked at the learning curve that they would experience in order to get from the present experience on hours expended in efficiency of manufacturing and cost of the material to what they would have to get in the production of the 130 units in order to meet the "$70 billion" figure that is being bandied about.

We remain convinced that, based on the data we have seen, that the learning curve that they have put on it, they the contractor, contractors, including their major subs, are on reasonable learning curves. They are today running close to three million hours of labor for the entire aircraft. They need to get to about 800,000 hours or less in order to meet the figure that has been quoted for the total program. Based on the first completed unit plus parts of the next four units that are in assembly, they are already showing a learning curve which, if they continue, will allow them to meet that.

As far as the engineering changes are concerned, we have incorporated in that about the same level in terms of percentage of costs that were actually experienced in the B-1, which is probably the closest to it.

Unfortunately, one can never extrapolate completely until one has flown, and so it is an extrapolation. And unfortunately, one can never extrapolate the learning curve until you have produced more than one or two. It is a little bit like taking a shot at a very small angle and your rifle makes a great dispersion out many hundreds of yards away. On the other hand, everything is reasonable.

So let me sum up the way we feel about the B-2. At DOD I reviewed this with Secretary Cheney and our position is the B-2 is as vital as it was when it was first initiated. It is as important to the future capability of this country as it was when it was first initiated. It is meeting all of the benchmarks as far as penetrability and its stealth characteristics. The technical risks which we see on it are relatively minor, within reason. The learning curves they have to get their costs down and the reserve which they have in there for engineering changes resulting from flight tests are reasonable by every standard we are able to measure.

Therefore, we are very much in favor of the program going ahead and we are going to support it. However, in the interest of full candor and integrity, we feel that we should let you know that in our minds there is some concern about not the money up front, not the money in 1990 or 1991. We are confident of that. But when we look out to the production quantities in the out-years, we are really basing learning curves on having completed one aircraft and parts of three or four more others. You really need more data to be perfectly firm in your figures. And we are basing provision for engineering changes on history of other aircraft, because, frankly, we have not flown this one yet. And, therefore, we must tell you there is some uncertainty as a result of those two factors in the final costs.

Now let me give you a ballpark estimate on what we think the uncertainty is. The production costs. We heard an awful lot about $750 million or $600 million per unit. The production cost of the 130 units is about $315 million per copy. We are talking about the effect of learning curves which could be a portion of the labor content which is in there. If we do not reach the estimated labor content, it could be off by as much as 2, 3, 5 percent. It would be a tremendous amount if it is off by that. So we are talking about a percentage of the labor content which could be, if it were 3 to 4 percent, could be $1.5 billion to $2 billion off.

If we talk engineering changes and if it is off by as much as 20 percent, we could talk about another $1.5 billion. So if you look at out-years, I would have to tell you again in candor and in the interest of integrity that there is some uncertainty in our mind.

I would tell you that that $70 billion is the most probable number as we sit here today, but the data that exists without any flight tests and without assembling more than one full and three or four partials leads me to say that there is a plus or minus figure on the $70 billion.

Chairman Nunn. Thank you for that explanation. What do you base your $315 million per copy production cost on? You know, we have all sorts of definitions of costs. How much have we already spent? If the B-2 program was cancelled today, how much would we have already spent on the B-2?

Mr. Atwood. We have appropriated through fiscal year 1989 and prior to that $22.4 billion. About $15.4 billion of that has gone into research and development; and the production—these are mostly for long-lead items—about $7 billion. We feel confident of that, obviously. And the to-complete of the R&D is about $5.5 billion more, and the production is $42 billion. So that if I took the $42 billion in production quantities out beyond and just made a rough estimate of 130, it is where I am coming to the roughly $315 million.

Chairman NUNN. So really you are taking the costs that have already been spent, that are sunk now, that are spent now, you are discounting those and saying we have spent those, and you are taking how many units we plan to produce and how much money we are going to spend from this point forward? Or are you excluding the R&D?

Mr. ATWOOD. I am excluding the R&D. I am taking the amount of money that we would expand on production and dividing it by the total number of production units, is how I ran into roughly the $300 million. And those are in then-year dollars, incidentally.

Chairman NUNN. How much is the Government committed to if we were to say no more right now? How much more money would the Government have to spend based on the contractual obligations?

Mr. ATWOOD. The $22.4 billion is what we have appropriated through 1989.

Chairman NUNN. So there are no penalty clauses beyond that?

Mr. ATWOOD. I would have to ask David or Sean.

Mr. O'KEEFE. I do not believe so, sir.

Mr. CHU. There probably would be some minor penalty amounts, presumably covered by moneys already appropriated for the most part. We would have to look specifically at that question.

Chairman NUNN. My time has run out. Will the Senator yield to let me finish this series on this, Senator Exon?

Senator EXON. Yes.

COMPARISON OF B-1 AND B-2

Chairman NUNN. How does the B-2 cost compare to the B-1 cost in equating the same-year dollars?

Mr. ATWOOD. We have that figure, too.

Mr. CHU. Let me page through my papers here.

Chairman NUNN. I believe you are using some numbers here that have previously not been given, are you not?

Mr. CHU. That is correct.

Mr. ATWOOD. That is correct. I did not intend to be surprising anyone.

Chairman NUNN. But we are dealing with information that has been previously classified, are we not?

Mr. ATWOOD. I did not believe it was classified, Senator, but you might be right.

Chairman NUNN. Well, my own feeling is we are going to have to declassify a lot of things if the B-2 is going to fly.

Senator EXON. You mean fly budgetwise or fly period? Both?

Chairman NUNN. Well, both.

Mr. CHU. I will get you that answer for the record if I may, since I did not bring the piece of paper with me.

Chairman NUNN. Mr. Atwood, tell us, I would like a comparison, whatever we can do in unclassified form, of the B-1 with the B-2. I would like a comparison in same year dollars of the B-2 with the B-58, B-52, previous developments. I would also like the so-called breakdown between overall acquisition costs, which is one number, the production cost, which is another number, fly-away costs, with an explanation of each one of them.

And I also believe if we are going to see this program prevail both in the committee and on the floor, there has to be a very thorough explanation, public explanation, of what missions the B-2 will perform, in other words its capabilities versus what we already have. Why do we need the B-2? Why does not the B-1 do everything the B-2 would do? We are going to have to have some of that, as much as possible in declassified form.

Mr. Atwood. Your questions are very valid questions. We have reviewed all of that and we will get that to you and declassify that which is essential to declassify. But I was giving you a summary of our review of just that, just those issues.

[The information follows:]

The triad of strategic forces has supported our national strategy of deterrence and maintained the peace for over 30 years. We continue to maintain the triad consisting of diverse ICBM, SLBM, and bomber systems that provide a robust retaliatory capability and hedge against unforeseen vulnerabilities or failures in any one element of our strategic forces.

The bomber leg of the triad is itself a diverse combination of systems, composed of penetrating bombers delivering gravity weapons and short-range attack missiles, bombers launching cruise missiles from standoff ranges, and shoot-and-penetrate bombers that combine a standoff cruise missile attack with a penetration mission. These various systems each have their own means of defeating defenses. Additionally, they reinforce each other. For example, the large number of air launched cruise missiles can saturate and disrupt enemy air defenses, thereby increasing the likelihood that penetrating bombers will reach their targets.

Although modernization of the U.S. bomber force with the ALCM-B cruise missile and the B-1B bomber has kept pace with Soviet air defense developments to date, the systems we have in place will find it increasingly difficult to penetrate Soviet air defenses over the next decade. The effectiveness of the B-52 and, to a lesser extent, the B-1B as penetrating bombers is steadily eroding due to the proliferation of improved Soviet air defenses. The capabilities of those systems that do not fully exploit stealth technologies are projected eventually to erode to unacceptable levels as Soviet defenses continue to improve and proliferate.

The B-2 offers revolutionary low observable technology to offset the ongoing and expected air defense improvements. Its low radar cross section will shrink the engagement zones of radars to effectively nullify their capabilities. Unlike the B-52 and B-1B bombers, we assess that the effectiveness of the B-2 will be relatively insensitive to the extent to which Soviet air defenses are attrited by preceding ballistic missile attacks. Thus, the B-2 will reduce the dependence of bombers on the other legs of the triad. Also, the B-2 does not rely on electronic countermeasures whose effectiveness against a changing threat is difficult to assess. These data are contained in Figure 1.

Figure 1 displays a summary of strategic bomber program development and production costs. Figures for the B-2 reflect current estimates; all other data are actual historical expenditures appropriately escalated. The column labelled "Total Development" is the total cost to develop the aircraft, including in-house government costs. "Flyaway" cost is all of the cost necessary to acquire the complete aircraft (i.e., primarily airframe, avionics and engines). Flyaway cost excludes most of the cost of supporting the aircraft. "Procurement" cost is flyaway cost plus those aspects of support costs funded in the procurement line, principally initial spares, peculiar support equipment, and other elements of integrated logistics support. "Acquisition" cost is the sum of development and procurement cost. Procurement unit costs decline with production quantity, and DOD acquired considerably more of the earlier aircraft than later ones. Therefore, in order to place each system's cost on a comparable quantity basis, the average cost for the first 100 aircraft also is displayed in the table.

Figure 1

Comparison of Recent Bomber Program Costs (Billions of FY 89 $)

						Average for First 100 Units:	
Program:	Quantity	Total Development	Total Flyaway	Total Procurement	Total Acquisition	Flyaway	Procurement
B-2	127	$21.4	$34.8	$42.9	$64.3	$0.296	$0.363
B-1A/B	100	$12.9 *	$22.4	$26.0	$38.9	$0.224	$0.260
B-58	116	$7.8	$12.9	$14.7	$22.5	$0.115	$0.140
B-52	742	**	$33.7	$40.9	**	$0.075	$0.103

Notes:

* Figure is for total development of both B-1A and B-1B.
$8.3 billion was expended on B-1A alone.

** Directly comparable B-52 figures are not available.

Chairman **Nunn**. Senator Exon.

B–2

Senator **Exon**. Mr. Chairman, thank you very much. Let me follow up the line of questioning that the chairman has been pursuing. This is something that I as chairman of the Strategic Subcommittee have worked on very long and very hard for years. I think we do need to come up with more declassified information than we have right now. Let me try and put this in perspective without revealing some of the material that I know is classified.

It is my impression that the B–2 bomber is a major breakthrough in technology, as opposed to just another bomber. The B–2 is such a leap forward that it cannot be compared, I think, with the B–1's improvement over the B–52's. I think it might be reasonable to say that it is comparable to the movement from propeller-driven aircraft to jet aircraft which was a major breakthrough.

From a war-fighting and deterrent standpoint, it is my view that, as costly as it is, the B–2 is a major leap forward. If the B–2 flies, which we hope it will very soon, would you not agree that the B–2 in some numbers in inventory would cause the Soviet military planner as much or more concern as any other of the systems that we currently have?

Mr. **Atwood**. I agree 100 percent with your analysis and how you arrived at that.

Senator **Exon**. And I believe, Mr. Atwood, that that is something that has not been sold, because all too often the B–2 is conceived by many people to be just another aircraft, and it is far more than that.

Mr. **Atwood**. It is indeed far more than that.

B–2 FLY DATE

Senator **Exon**. Can we talk in an unclassified fashion for the first time about when the Department of Defense believes that the B–2 will fly? It is not classified, but we knew that the plane, after a year's delay, was to have flown last February or March. That did not happen. I keep hearing statements that it could have flown any time. Can you give me your best estimate in the public forum today as to when we expect that aircraft to really take off the ground? Is it a matter of weeks, days, months, or years?

Mr. **Atwood**. It is a matter of within the next 2 to 3 weeks. They will be doing some taxiing runs. My concern is, with the lift capability, that they not taxi too fast or they will find, like Howard Hughes in the Spruce Goose, that they may have flown it already, and we need to be concerned about that. But they do intend to flight test that, or initiate the first flight within the next several weeks.

B–1B

Senator **Exon**. Let us back up to the B–1B for just a moment. It is the Department's recommendation, as I understand it, that we proceed to fix up, patch up, correct, redesign, add on, whatever you are going to call it, the electronic countermeasures, commonly known as ECM, that were far below what was anticipated when this aircraft was ordered. Is that a fair statement?

Mr. ATWOOD. That is a fair statement.

Senator EXON. How much, from what you know now in the Department of Defense, is the total cost of correcting the ECM deficiencies of the B-1B?

Mr. ATWOOD. It is partly a cost to fix something, but it is also a cost to add things in which we want to. I think David has some figures on that.

Mr. CHU. It would be several hundred million dollars more to bring the ECM capability to the level that is now planned. That is not as high a level as some had initially wanted. There will be some other changes, which I would prefer to get into in closed session, to the aircraft. We can get you a complete fact sheet that lays out all the elements that are proposed. But it is, relative to what some might want done to the aircraft, a relatively modest package, not as ambitious as some would argue for.

Senator EXON. So what you are saying, Mr. Atwood and Mr. Chu, is that basically the additional money that we are proposing to spend to make the B-1B somewhere near what we expected it to be could be several hundred million dollars? Is it fair to say that that is going to be somewhere between $500 and $1.2 billion? Is that the range?

Mr. CHU. Yes, sir.

Senator EXON. Let us say for round figures that it costs a billion dollars to do this. How much of that billion dollars, if any, is going to be paid for by the manufacturer of that aircraft, that in the opinion of the Department did not live up to the commitments that were made when the aircraft was built? And how much of it is going to be additional money that the taxpayer is going to have to fork over? I can understand you do not expect the contractor to pay for new additions, new technology, new engineering that we want to build into that. Maybe my basic question is, how much of anything is the contractor going to have to pay for the shortcomings that we have in ECM where the B-1B is concerned?

Mr. ATWOOD. I think that is to be determined in our discussions and our negotiations with them. But that is the area that we would see approaching them for their part of the cost.

Senator EXON. Well, are you saying then that we are going to demand that the contractor pay their fair share of any shortcomings that can be tied to them?

Mr. ATWOOD. That is correct.

Senator EXON. Thank you, Mr. Chairman. My time is up. Thank you, gentlemen.

Chairman NUNN. Thank you, Senator Exon.

B-1 CORRECTIVE ACTION COSTS

Mr. Atwood, on this B-1 matter that we are talking about, it is my understanding that the corrective action costs are somewhere in the neighborhood of $700 or $800 million, is that right?

Mr. ATWOOD. That is the range that Senator Exon mentioned, yes.

Chairman NUNN. The Department has not requested in this year's budget any funds to pay for those costs?

Mr. CHU. No, sir. There are some costs shown in the fiscal years 1990–1991 budget. Now, the total figures that people talk about are over the 5-year period of time.

Chairman NUNN. Do you have some money requested this year?

Mr. CHU. I believe so, yes.

Chairman NUNN. Could you check on that?

Mr. CHU. Yes.

[The information follows:]

The fiscal years 1990–1991 President's budget does not request funds for completion of the ALQ-161 "core" program. We plan to finance most of this effort with funds from the expired or lapsed account—funds that approximately offset the B-1B's contribution to that account. We are, however, requesting $46 million in fiscal year 1990 and $70 million in fiscal year 1991 for a radar warning receiver (RWR) for the B-1B. Since the RWR is needed to improve the B-1B's defensive avionics capability to near original specifications, it is considered part of the baseline program that Congress expected to be financed within the $20.5 billion (FY81$) cap.

Our Five-Year Defense Program (FYDP) requests approximately $1.4 billion in new investment funding for the B-1B. New investment funding is distributed between "baseline" requirements ($739 million) and "beyond baseline" requirements ($687 million). The $739 million in proposed fiscal years 1990–94 funding for baseline requirements is for deferred electronic countermeasure depot support equipment ($250 million) and the RWR ($498 million). The $687 million requested for improvements to the B-1B beyond its baseline configuration funds the integration of the Short Range Attack Missile (SRAM II) and Global Positioning System (GPS) on the B-1B, as well as other modifications and enhancements.

"M" ACCOUNT

Chairman NUNN. It is my understanding that there is an indication that there is going to be an effort to pay for this through the so-called "M" account, which is a repository of funds provided to the Department in prior years for a specific program which the Department did not obligate within the requisite period of time on that program. And it is my understanding that this would allow, according to some people's theory, the Department to obtain funds for a particular program and obligate those funds out of the "M" account. How much money do we have in that "M" account?

Mr. O'KEEFE. Sir, the "M" account itself is a fluid number from a day-to-day basis on how much is beyond the scope of availability for obligation of a certain fiscal year. In terms of the specific proposition, you are talking about the only thing or costs that would be permissible in that area or to be derived from the "M" account would be those costs that could be directly associated within the scope of the original contract as signed previously. So we do not anticipate that we are going to be looking at the entire financing to come from that area by any means, and if anything I expect it to be very small.

Chairman NUNN. You are not talking about paying $800 million out of that "M" account?

Mr. O'KEEFE. No, sir, absolutely not.

Chairman NUNN. What is the difference between the "M" account money and shifting that money to a program like the B-1 patch-up, if we could call it that, and a reprogramming, which requires the approval of the four committees?

Mr. O'KEEFE. I think the distinction is that, to the extent that you derive funds for within-scope efforts that were conceived as part of the contractual terms or the original obligation as it was conducted at the time it was done, that is a permissible charge when you look back to a just previously recorded obligation.

Chairman NUNN. Obligation of whom, the Government?

Mr. O'KEEFE. Yes, sir. And in particular—well, you have a contractual obligation where the cost is anticipated to be X or you have obligated X amount.

Chairman NUNN. But the B-1 problems are not largely problems of contractual obligations on the part of the Government, are they?

Mr. O'KEEFE. Only to the extent that there is any economic change that will occur as a result of inflation costs or previously adjusted expense.

Chairman NUNN. Yes. I had understood that that "M" account was used, for instance, if there was a lawsuit relating to a contract where the Government had failed to do something that it was supposed to do, or someone was being sued. So is it a funding mechanism for programs to take care of obligations the Government has contractually, is that what you are saying?

Mr. O'KEEFE. Absolutely.

Chairman NUNN. But now most of this remedy work on the B-1 is not something the Government is obligated to do, right?

Mr. O'KEEFE. Precisely right. That is why there would be very little, if any, that I can imagine that is going to be derived from the "M" account per se, and it would have to be tied or demonstrated specifically to a previously recorded obligation within the scope of that effort at the time.

Chairman NUNN. Who has control of the "M" account?

Mr. O'KEEFE. Ultimately, the OSD comptroller does in this particular case, to permit movements within the accounts. That is the ultimate conclusion there.

Chairman NUNN. Can that money be spent without your signing off on it?

Mr. O'KEEFE. I believe they have to work it certainly through the DOD comptroller's office. But again, if you can demonstrate that there is a within-scope cost, that it is an inflation-related expense, economic circumstance, whatever it is you contractually dealt with before on a previously recorded obligation, those may be quarterly reported in some cases, but it has to be demonstrated in that regard.

Chairman NUNN. Quarterly reported to whom, to you?

Mr. O'KEEFE. DOD comptroller, yes, sir.

Chairman NUNN. But you do not sign off on each one of them?

Mr. O'KEEFE. In this particular case, yes, we would.

Chairman NUNN. In which particular case, B-1?

Mr. O'KEEFE. In the case of B-1, yes, sir.

Chairman NUNN. In other words, you are assuring us here today that you are not going to spend money on the B-1 program, additional money on the B-1 program, without your knowing about it and signing off on it at the DOD level? Is that what you are telling us?

Mr. O'KEEFE. Yes, sir. We are already discussing some of this with the Air Force at this time as to how much would be derived, if any, from the "M" account.

Chairman NUNN. What notice, if any, is given to Congress before funds are restored from the "M" account and made available for obligation? What can we get in terms of assurance from you on this in relation to the B-1?

Mr. O'KEEFE. I do not know what the scope of the problem is going to be at this point and at this juncture. I do not know how big.

Chairman NUNN. Will you keep us informed?

Mr. O'KEEFE. Absolutely, positively.

Chairman NUNN. So you are telling us you do not have any intention of going over to the "M" account and grabbing $800 million and launching into a program on the B-1 without having requested the money and without having notified Congress and gotten approval of Congress?

Mr. O'KEEFE. Unless there is something that is being considered by the Air Force at this time, which we would not be particularly kindly to, no, sir, we would not intend to do that.

Chairman NUNN. Well, my understanding of the chain of command is, Mr. Atwood, you all are in control of the Air Force, at least in theory. Are you not?

Mr. ATWOOD. I am more in control right now than I was. We will assure you that we will not do that.

Chairman NUNN. I may end up being in favor of it, but I think it has to go through the normal process.

Mr. ATWOOD. We will make sure that it does, I assure you.

Chairman NUNN. Let me ask one other question relating to the General Accounting Office testimony. I believe we have a chart down there, and we could all take a look at it.

Mr. ATWOOD. While they are doing that, could I make a correction. I may have misled Senator Exon in saying that or implying that the major part of all of the changes that would or would not be made to the ECM would be customer-borne costs. I understand that much of it was design that we may have approved or participated in and therefore there is some question as to what DOD's responsibility is. I will get back to you on that.

Chairman NUNN. Thank you.

[The information follows:]

Under the provisions of the current contract, both the government and contractor have liability responsibility. The government is still negotiating certain outstanding undefinitized contract actions with the contractor. When these contract actions are concluded, we will know the extent of contractor and government liability.

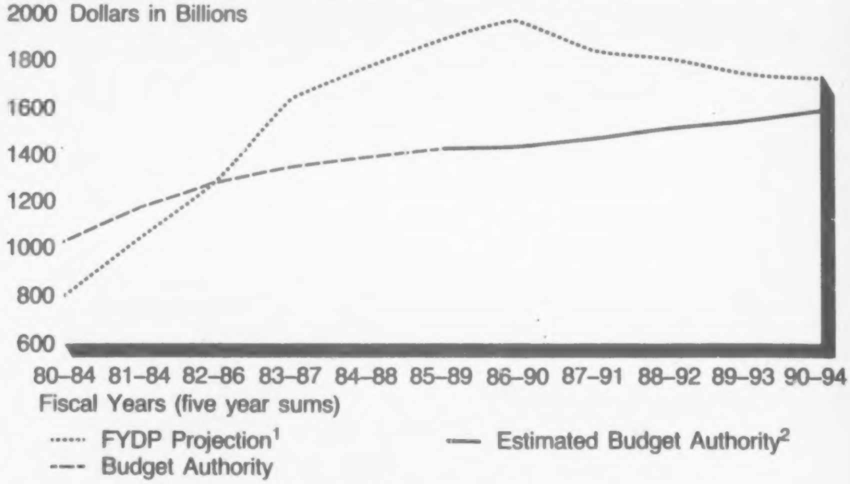
FIVE-YEAR DEFENSE PROGRAM

Chairman NUNN. I guess you all have seen this chart. What it shows, as I understand the chart, is that the Five-Year Defense Program, even after the Carlucci cuts, the Bush-Cheney cuts, and so forth we have talked about, still has $100 billion more in the Five-Year Defense Program than the budget is going to permit based on estimated budget authority. And that does not even take into account that if the budget went down to zero real growth another $50 billion would have to be cut. Have you seen this chart?

Do you understand it? Do you agree with it? What are your observations on that?

[The chart referred to follows:]

GAO Additional Reductions Required



[1] DOD's FY 1990–1994 planning figure is adjusted upwards by $93 billion. This reflects $45 billion in program reductions necessary, but not yet made, to meet the Administrations latest fiscal guidance and CBO inflation assumptions which add $48 billion.

[2] DOD's budget authority estimate is lowered by $54 billion. This assumes Congress will grant full inflation funding but no real growth for fiscal years 1991 through 1994.

Mr. O'KEEFE. There are three different elements of expense, I guess, that go into GAO's testimony on the point, the first of which is what they have categorized as the unrealistic inflation assumptions, which is $48 billion of that amount.

Chairman NUNN. Unrealistically low?

Mr. O'KEEFE. Yes, sir, that is their argument. In this particular case we are using the exact same index that OMB has used for the rest of the Federal Government.

Chairman NUNN. What is that inflation number that you are assuming?

Mr. O'KEEFE. The out-years I believe are, for 1990 we are looking at a 3.6 percent composite number, 3.3 in 1991, and 2.8 for 1992. So for purposes at least of the budget submission, it is 3.6 and 3.3 respectively.

The counter I think that the Department has developed on this point is that in the early 1980s the Defense Department had a separate index that was used for composite defense-related expenses separate from the rest of the Federal Government. We used the particular index to demonstrate how unique Defense Department inflation costs should be measured. Congress determined that that was not an appropriate method, so we reported back to the same standard OMB uses government-wide. So to the extent that it is understated, there has already been a determination in years gone by that that was not an appropriate procedure to begin with.

The second element of expense that goes into the $150 billion I guess is the planned funding increase of $54 billion, is their argument that if you straight-line the current program at a zero rate for the balance of the 5-year plan we are overstated by $54 billion. The two points I guess that are applicable in that case are that GAO is prejudging the action of Congress relative to what the President's plan may be. It is a speculative call as to what Congress will do relative to what the President's request will be beyond the current budget year certainly. The second factor it implies is that the Congressional Budget Office baseline of zero real growth, if you assume that straight out for the 5-year plan, would suggest that the overall pricing of the defense program is up by about $7.5 billion over the same 5-year period. So there is a bit of a double counting or a double assumption factor that goes between those two numbers.

I guess the last statement is the $45 billion wedge that has been so widely written about. The two composites in that area are a 4-percent scrub factor that we have decided or have determined would be not an unreasonable historic kind of estimating of what current information would yield on pricing and costing factors, that could be derived from the top line. The second factor involved in that and as well offsets it is a 2-percent allowance for what we consider as unknown or unanticipated requirements that may emerge during that time. The objective in that case is to respond specifically to Congress' concern that the FYDP be made into a realistic, meaningful planning document. And in doing so, we want to develop factors, that would look at what the impetus would be to scrub costs and bring them into line with what current data would present in the out-years, as well as to look at unanticipated requirements.

So in the end I think that all the factors that have been put together in the $150 billion estimate are understood. I understand the derivation of them, but I do not see the validity in an awful lot of it. It is a concern that I do not think at this particular stage of the game indicates that there is any major problem in the out years.

Chairman NUNN. In other words, you think that we have the problem in the out-years, based on the budget submission this year, under control? You do not believe we have a huge bow wave out there?

Mr. O'KEEFE. Not based on the argument that GAO has raised. Certainly, to the extent that the Defense Department and Congress were to reverse the major budget decisions or major program decisions made in this 1990 amendment, at least for the programs Mr. Atwood has walked through in his testimony, you are looking at an $18.3 billion budget authority cost over the course of the 5-year plan, and that is an absolute. So regardless of what the validity of the $150 billion is, to the extent that Congress makes decisions on those programs just as the Secretary mentioned this morning, you are looking at an impact to the tune of $18.3 billion over that 5-year period.

Chairman NUNN. We will follow that with interest and hear from you further on as we move along.

DOD'S MANAGEMENT PRACTICES REPORT

One other line of questioning, Mr. Atwood. President Bush has ordered a review of the Department of Defense's management practices. Originally a report was due on May 9, and of course the date has slipped, which is understandable. Have you completed it?

Mr. Atwood. Yes, we have completed it and it was submitted to the President. He is evaluating it now.

Chairman Nunn. Has he been briefed or has it been submitted to him?

Mr. Atwood. It has been submitted to him and we were going to brief him, but Secretary Cheney met with him and I have not talked to him since then as to the degree of briefing. But we are prepared, if he needs further briefing, to go over it.

Chairman Nunn. When do you estimate you will get a decision? Is this something that the President is going to sign off on completely or partially?

Mr. Atwood. We are anticipating that it will be signed off and we will be coming to Congress with it next week.

Chairman Nunn. Next week?

Mr. Atwood. Yes, sir.

Chairman Nunn. Will there be legislative proposals that will be a result of it?

Mr. Atwood. Yes, sir. We are hoping to work closely with Congress to determine those areas where actions can be taken mutually between the Department and Congress on some legislation which we feel will simplify matters.

Chairman Nunn. Are you going to ask us to take those requests into account during our markup on this year's bill?

Mr. Atwood. We will be working with you on it, and I do not anticipate that that would happen. This would be a longer-term solution to our problem.

Chairman Nunn. Does the report identify management changes that will result in specific dollar changes that can be used to fund new programs or avoid program terminations or reductions in this fiscal year?

Mr. Atwood. I want to be very careful and not preempt the President. He obviously has not approved it yet, but the general answer to your question is yes.

Chairman Nunn. Will the changes resulting from the management savings save enough money to make any appreciable changes in your budget this year?

Mr. Atwood. For 1990, no. It is a little bit like the buildup on closing the bases. You sometimes spend a little bit more in the first year. So the buildup will be over a period of 3 years.

"ILL WIND" INVESTIGATION

Chairman Nunn. Have you all been able to get enough results from the management side of the "Ill Wind" investigation to take some of the abuses that have come to light or may come to light in that investigation into account?

Mr. Atwood. Yes, and as you know, we are working with the contractors on ensuring that they have in place a monitoring system for them to assure themselves that in fact there can be no misunderstanding by anyone who works in any defense industry company that the results of any misbehavior will lead to severe punishment within the company as well as by the law itself.

Chairman NUNN. Are you getting a good bit of information from law enforcement as to the nature of the abuses? I am not talking about case-by-case, but are you being briefed, is DOD being briefed, about the abuses that have occurred so that you can take them into account in current management plans as well as in the future?

Mr. ATWOOD. We have been briefed in sufficient detail, based on those cases that have either come to court or that have come to final disposition. On the other hand, for very valid reasons, the U.S. Attorney is not one to brief us as he is going through his investigation, and I would understand that, too.

Chairman NUNN. Do you have any information from the U.S. Attorney as to when they will be far enough along so that we could actually air in public some of these management problems?

Mr. ATWOOD. I really would have to defer to him. I do not have a feel on that.

Chairman NUNN. It is going to be important to have some hearings on that. We have held off as we do not want to interfere with any cases under way. But as cases are completed, it seems that both DOD and Congress are going to have to get into this to see what went wrong, how it went wrong, was it a violation of existing law, was it a violation of existing policy, is there any current need to change the law and the policy, and so forth. We are going to have to look into that at some point.

Mr. ATWOOD. We are in the same position that Congress is in. We clearly do not want to get into the middle of a problem that exists that the U.S. Attorney is investigating, and we are participating, cooperating, in every way along the line. But I am not trying to get into it to determine the facts right now, as you mentioned.

Chairman NUNN. Do you know of anything right now that would indicate that we need changes in the law?

Mr. ATWOOD. No, I do not.

Chairman NUNN. None that you know of?

Mr. ATWOOD. None that I know of. The cases that I have heard about are clearly breaking the law and are not that we wish the law were something different.

Chairman NUNN. So we do not have any real loopholes, big loopholes out there that you know anything about right now in the law that permits abusive behavior that is not illegal?

Mr. ATWOOD. None that I know of.

Chairman NUNN. Thank you very much, Mr. Atwood, Mr. O'Keefe, and Mr. Chu for being here today. You have been a great help to us and we look forward to working with you.

The committee is going to start our markup after the July 4 recess. My understanding is that the House will start before then. We are going to be very, very busy both in the committee and on the floor in the month of July.

I told some Air Force witnesses the other day on the question of the B-2, it is going to be very important to be able to present information, not only on the costs in an accurate way, which you have done a lot of here today, but also on the question of performance and what we can expect from that aircraft. I know that there is a need for some secrecy in the program and that is going to continue. But it does not do a whole lot of good to keep something secret if the result of keeping it secret means that you do not get the aircraft built. I think that we have to take that into account if we do it, because in my opinion the B-2 furnishes a tremendous increase in capability.

We have to be able to explain, the Members of Congress have to be able to explain, to the American public what we are going to get for what has been described as over $500 million per aircraft. You described it in terms of production costs as around $300 million. It depends on how you do the arithmetic, and that is a question that is not easy to answer. It is a lot of money. So we hope you will take a look at that and work with the Air Force and be able to discuss in public some of the very important capabilities of this aircraft.

Mr. ATWOOD. We would be very happy and we will work with you. I attempted today only to summarize the results of many, many hours of detailed look-sees, and would make that available to you, and I am sure you would need that.

Chairman NUNN. Do you have anything else you would like to submit this morning?

Mr. ATWOOD. No, I think we have covered everything we wanted to.

Chairman NUNN. Thank you very much for coming this morning, gentlemen.

[Questions for the record with answers supplied follow:]

QUESTION SUBMITTED BY SENATOR J. JAMES EXON

ATF AND A-12

Senator EXON. The budget proposes the termination of the Air Force F-15E and the Navy F-14D. This means that we are counting more heavily upon the ATF and A-12 now under development. Both the ATF and the A-12 are to serve both services. Yet, I am concerned that with the Air Force taking the lead on the ATF, the special requirements for a carrier-based fighter may not be met. Similarly, I wonder how satisfied the Air Force will be with a subsonic attack plane like the A-12. Can you ease my worry in this regard?

Mr. ATWOOD. The speed issue for the A-12 was raised in closed hearings before the House Armed Services Committee on March 1, 1989. Lt. Gen. Ronald Yates (SAF/AQ) responded that maximum speed is not an issue. The A-12's effectiveness will be achieved with a blend of range, lethal weapon load, delivery accuracy, survivability, and performance.

The special requirements for a carrier-based fighter are being carefully considered in the development of the Navy variant of the ATF. These requirements will, no doubt, result in an airframe design that differs from the Air Force design. The MOA between the Navy and the Air Force and the DOD certifications in response to congressional requirements regarding joint development assure full Navy participation in ATF source selection. The Navy will have evaluated the capabilities of the competing contractors to meet its unique operational requirements and will be able to ensure that the design selected will satisfy those requirements.

QUESTIONS SUBMITTED BY SENATOR ALAN J. DIXON

TERMINATION OF AH-64

Senator DIXON. We have heard testimony in this committee for the past few years that we have an inadequate anti-armor capability against Soviet armor forces that will not be significantly improved until the mid-1990s. Since this vulnerability exists, why are we canceling one of our best systems, the Apache, which is available now to meet this Soviet armor threat?

Mr. ATWOOD. The Army had to make some tough choices to stay within the President's budget guidelines. Trade-offs made supported the best security posture achievable. Termination of AH-64s still procures 807 aircraft which supports 40 of the 47 resourceable battalions. Assuming all 47 battalions made it to the fight, this equates to a 15 percent reduction in armed helicopter tank killing capability, however, five of the terminated AH-64 battalions do not arrive until after D+60 which makes the real reduction 3 percent. This is an acceptable near-term risk that will be offset by the fielding of LHX in fiscal year 1997.

CAS MISSION OF AH-64

Senator DIXON. I understand that General Russ, the Tactical Air Commander, recently said that the close-in air support mission could be best performed by attack helicopters. Since currently available aircraft are inadequate for this role and plans for an aircraft are still being developed, again, why are we canceling the AH-64 helicopter that is currently available to perform the close air support role?

Mr. ATWOOD. Army attack helicopters, to include the AH-64, do not perform the close air support mission. Army aviation assets are completely integrated within the command of the ground force commander; Air Force assets, which include CAS and BAI combat aircraft, provide the joint force commander with the capability to concentrate air power quickly at selected points across his entire theater, land and maritime. A balanced mix of Army attack helicopters and Air Force CAS and BAI aircraft are needed in close battle. These are not duplicative but complementary, and their differing combat capabilities provide the required flexibility and responsiveness necessary for an effective military force. This effectiveness and responsiveness, both in the localized close battle and across the theater, are particularly the key to our ability to fight outnumbered and win. The cancellation of the AH-64 directly affects the Army's maneuver assets, not Air Force close air support. Air Force concepts for a replacement for the current CAS aircraft have been submitted since 1985.

The cancellation of AH-64 procurement is an affordability decision. The Army will still procure 807 aircraft which supports 40 of 47 planned battalions. Assuming all 47 planned batallions made it to the fight, this equates to a 15 percent reduction in armed helicopters tank killing capability, however, five of the terminated AH-64 battalions do not arrive until after D+30 which makes the reduction 3 percent. This is an acceptable near-term risk that will be offset by the initial fielding of LHX beginning in fiscal year 1997.

The Army had to make some tough choices to stay within the President's budget guidelines. The trade-offs which have been made support the best security posture achievable.

RESTART REQUIREMENTS OF AH-64

Senator DIXON. As is the case in the termination of the F-15 and F-14, canceling the Apache will leave us without a warm attack helicopter production base until the mid-to-late 1990s. Can the Apache line be quickly reactivated and at what cost if force regeneration is required?

Mr. ATWOOD. The time required to reactivate the AH-64 production line would be approximately 6 months; however, the time required until Apaches could be produced would be 2 years due to long lead items. The cost to restart the AH-64 production line would be approximately $400 million.

EFFECT OF AH-64 CANCELLATION ON GUARD/RESERVE

Senator DIXON. Since approximately seven Guard and/or Reserve attack battalions will not receive the Apache if it is canceled, how do you plan to modernize these forces and at what cost?

Mr. ATWOOD. The units, (2 Active, 2 USAR, and 3 National Guard) to include personnel and equipment, will be removed from the structure.

FOREIGN MILITARY SALES OF AH-64

Senator DIXON. I also understand that terminating this program will severely curtail the foreign military sales of the Apache. What are the projected losses in foreign military sales especially considering that several countries have expressed an interest in buying the Apache?

Mr. Atwood. The termination of this program is expected to have no impact on the only foreign military sale under active consideration (Israel). There are, however, several potential sales which could be affected by such a termination if we accept the assumption that the foreign customers will not make firm decisions before finalization of the last U.S. Army contract. It is difficult to predict impact. It is conceivable that prices may change with any subsequent contract negotiations.

United Arab Emirates.—There is a 3-week field trial involving two leased Apaches scheduled for August 1989 in the UAE. If the government of the UAE decides on this helicopter, they are expected to ask for 12.

Egypt.—The GOE has expressed an interest in 24 AH-64s. It is not clear however that there are sufficient funds available for such a program. This potential sale could be impacted by a termination since it is unprogrammed as of this point.

Netherlands.—The GON has expressed an interest in the AH-64. We expect no decision on their part, however, until after their elections which are currently scheduled for September 1989. The Dutch are interested in 35 attack helicopters and 15 for a scout role. If there is a firm requirement developed, this program could be affected by a termination, if the Dutch were unable to fund and contract during the periods 1990-1992.

Spain.—McDonnell Helicopter conducted a demonstration of the AH-64 in June. There is not a clear indication of Spain's requirements, nor do we think there are sufficient funds available for purchase.

1990/1991 PURCHASE OF AH-64

Senator Dixon. Some question if you have budgeted enough money for fiscal years 1990 and 1991 to buy the 66 Apaches that you are requesting. Is there a total shortfall of $145 million for those two years?

Mr. Atwood. The Army estimates it could buy 57 and 54 Apaches in fiscal year 1990 and fiscal year 1991 respectively with the currently budgeted amounts of $788.6 and $785.8 million. The shortfall to buy 66 Apaches in each year is $67 million and $30 million.

FLEXIBILITY OF F-15E

Senator Dixon. In light of President Bush's proposed 15 percent reduction in NATO aircraft, a dual role aircraft such as the F-15E is likely to play a more critical role in this new numbers game. Are you reviewing your position on the F-15E considering that deploying to Europe would help maintain an Air Force capability near levels that we currently have while complying with the President's proposal, assuming it is accepted?

Mr. Atwood. Presently, we are studying several force structure options to meet the requirements of a 15-percent reduction in Europe. Naturally we want to maintain as flexible a fighting force as possible. The F-15E offers the kind of mission flexibility we need and will play heavily in the final outcome.

RESTART REQUIREMENTS OF F-15E

Senator Dixon. Cancelling this F-15E program without a follow-on aircraft in production means that we will not have a warm production base until the advanced tactical fighter is produced in the mid-to-late 1990s. If the new fighter is delayed and/or too costly to procure as currently planned, how costly and how soon can the F-15 production base be restarted to address the shortage of aircraft caused by delays or cost overruns?

Mr. Atwood. Once the F-15E production line is terminated, it will cost approximately $115 million in constant year 1990 dollars to restart the line. In addition, it will require approximately 44 months (12 additional months) to the first deliveries. Further, the recurring cost would reflect a significant increase as a result of lost "learning." This increase is estimated to be 10 percent over 4 years at 36 aircraft per year.

TERMINATION AND MAINTENANCE COSTS OF F-15E

Senator Dixon. According to the Congressional Budget Office, halting the F-15E program may not save money. The Air Force says termination costs and maintenance costs for existing F-15Es need to be funded and that overhead costs associated with the F-15E would be shifted to other programs, making them more costly. There may be additional pressure to add more funds to develop the new follow-on fighter as well. Do you agree with the CBO's findings?

Mr. **Atwood**. I agree with the CBO that in terminating the F-15E program, or any program for that matter, there are additional costs that must be borne in the near term. We recognize that there are termination costs and there are maintenance and support costs for existing F-15Es that need to be funded. These costs were included in the budget that we submitted in fiscal years 1991-93. After providing for these costs, we achieved an overall $3 billion reduction in the FYDP by terminating the F-15E program after fiscal year 1990. Follow-on tactical aircraft are already funded in the FYDP, the Advanced Tactical Fighter (ATF) for the counter-air mission and a variant of the Navy's A-12 for the strike attack mission currently performed by F-111s and F-15Es.

F-15E PURCHASE SHORTFALL

Senator **Dixon**. The Air Force planned to buy 392 F-15E aircraft to complement the F-111 deep strike force. What does the 78 aircraft shortfall do to our capability, especially considering we are eliminating our intermediate range missile?

Mr. **Atwood**. Although the requirement for reasonable assurance of success is much higher, the USAF and Congress settled on 392 aircraft (4 tactical fighter wings) in 1984 as an affordable fiscally constrained program when purchased at economic rates of approximately 60 per year through fiscal year 1993. The fiscal year 1989 amended the President's budget still procured 392 aircraft through fiscal year 1998. Fiscal constraints further limited the total buy to 278 in President Reagan's fiscal year 1990 budget but completed the buy within the FYDP. President Bush's amended budget further cut the buy to 200 aircraft due to tighter fiscal constraints. The direct impact of President Bush's cut on combat coded force structure is the [deleted]. The effect on warfighting is reduced assets and sorties available for the air-to-air and conventional deep interdiction missions world-wide and [deleted]. Additional impacts are the loss of the industrial base to produce our most capable multi-role aircraft years before the ATA will be available and the increased warfighting risk of having far fewer proven dual capable aircraft available to meet the urgent requirements of theater commanders.

Questions Submitted by Senator John W. Warner

TANK RECOVERY VEHICLE

Senator **Warner**. I understand that the current tank recovery vehicle is inadequate in that the M1A1 tank weighs more than the recovery vehicle. Therefore, when an M1A1 tank in under tow by the current recovery vehicle, if the vehicle must go down slope, then *two* recovery vehicles (or two tanks) must be used—one in the front and one in the rear of the tank being towed. Was the decision to terminate the M-88 based primarily on affordability or were there other factors involved?

Mr. **Atwood**. The Army reported that using a M88A1 as a towing vehicle and another M88A1 or a M1A1 as a holdback vehicle is a safe way to recover tanks as long as prescribed procedures are followed. The Army, and the USMC upon fielding of their M1A1s, will continue to execute the tank recovery mission with appropriate safety restrictions in force.

The decision to terminate the Improved Recovery Vehicle program was not based strictly on affordability. There were also technical problems with the system that entered into the decision. Independent evaluation of the Improved Recovery Vehicle candidates revealed that, although BMY's M88A1E1 had demonstrated technical feasibility for ultimate service as the Army's recovery vehicle, the M88A1E1 was not "suitable in the configuration tested" in a Technical Feasibility Test conducted from April 15 to July 4, 1988. The principal concerns were:

Overall lack of power—the M88A1E1 did not meet the IRV maximum sustained speed requirement with and without a towed load or the maximum speed requirement; engine and transmission cooling; and overall usability of the main and auxiliary winch systems.

Also, an independent operational evaluation, based on a Technical Feasibility Test and a side-by-side user test conducted from July 8-29, 1988, showed that the M88A1E1 did not fully meet performance requirements. In particular, although the M88A1E1 had improved capabilities for 70-ton loads compared to the existing M88A1, problems with the M88A1E1's winches and its inability to meet the towing requirement for 30 percent slopes were the two major factors in not meeting the performance requirements.

UNPLANNED LOSSES OF AH-64

Senator **Warner**. Will the unplanned losses of AH-64 aircraft during the sudden severe thunderstorm at Fort Hood, Texas, alter in any way either the reductions in procurement for fiscal year 1990 and fiscal year 1991 or the termination in fiscal year 1992?

Mr. **Atwood**. No. It has been determined that all the damaged aircraft are economically repairable.

FOLLOW-ON CAS AIRCRAFT DECISION

Senator **Warner**. Since the follow-on close air support aircraft decision will not be made until completion of a proposed OT&E test plan, which will require 12 to 18 months after it is finally approved, what criteria was used to reach the decision to reduce the Army's organic airborne anti-armor capability in the meantime?

Mr. **Atwood**. The follow-on close air support aircraft decision is not closely related to the Army's decision to reduce their organic anti-armor AH-64 attack battalions from 18 to 15 aircraft each. We believe the two systems complement each other and are not competitive. The Army's decision was made purely on the basis of affordability. The Army plans to complement the AH-64s in the attack battalions with the LHX once that aircraft becomes available and has replaced the aging AH-1/OH-58C aircraft in the cavalry units.

OH-58D AND LHX

Senator **Warner**. I appreciate the Army's desire to continue development of the LHX for the late 1990s and beyond; however, the Army OH-58D is currently fielded, and, according to Army leaders, provides a quantum advantage to tactical units through successful night operations, at extended ranges, and without being seen. Why wouldn't we continue this successful program until LHX is developed and proven?

Mr. **Atwood**. The marginal increase in capability of the OH-58D could not be justified in light of resource constraints and the need to continue development of LHX. Its airframe is Vietnam-era with questionable survivability and limited growth potential. Additionally, the funded program provides for critical interim capability.

AHIP AND LHX

Senator **Warner**. I have been told that Secretary Marsh appealed Secretary Cheney's decision to terminate the AHIP and asked that the Army be allowed to take its share of cuts in other programs. If this is true, what were the reasons behind denial of his requests?

Mr. **Atwood**. DOD judged the Army's proposed offset programs to be of higher priority than AHIP and we concluded the money was needed to fund LHX. LHX is an objective solution in an era of tight budgets in which we cannot afford both LHX and AHIP.

Senator **Warner**. Last August you stated that a DRB decision to allocate resources to produce armed OH-58Ds alleviated a longstanding objection to fielding large numbers of unarmed helicopters. If last year you saw merit to an armed AHIP program, why did you recommend termination this year?

Mr. **Chu**. The longstanding objection expressed in the August letter opposed introducing large numbers of unarmed helicopters to the battlefield regardless of their type or role. The armed AHIP alleviates that objection. However, AHIP has not yet demonstrated its utility when acting in concert with attack helicopter units. Thus, we support the current AHIP inventory, which provides capabilities for the Field Artillery Aerial Observation (FAAO) and aerial cavalry roles only. Additional AHIP aircraft would provide only a marginal increase in capability, one that has not been demonstrated, and one that could not be justified in light of resource constraints and the need to continue development of LHX.

ATHS CAPABILITY

Senator **Warner**. The recent DRB action made a much needed decision to move toward establishment of a follow-on close air support capability through funding air-to-ground modifications for 225 A-10 and 146 F-16 aircraft. One of these modifications is the Automatic Target Handoff System, or ATHS. Installation of this system in these aircraft gives to these high performance aircraft the ability to receive ATHS information. The sending portion of this remarkable new system, however, is contained aboard the OH-58D. How do you explain installation of one side of the overall system into one set of assets, while cancelling assets which possess the other half?

Mr. ATWOOD. The Army purchased ATHS for OH-58Ds to support AH-64s and TACFIRE. ATHS on board CAS aircraft is secondary to the primary purpose for which ATHS was procured. The ATHS is able to send and receive, therefore, the same unit is on A-10, F-16, OH-58D, AH-64 and the Artillery TACFIRE system. Though more OH-58Ds are desirable, they were unaffordable. Each Army corps and all heavy divisions will have an ATHS capability.

V-22 OSPREY

Senator WARNER. General Lindsay, Special Operations Forces Commander, has testified that the V-22 is critical to accomplishing his mission, particularly the long range insertion/extraction and hostage rescue. How will these missions be accomplished satisfactorily without the V-22?

Mr. ATWOOD. The primary contribution of the Special Operations Forces (SOF) variant of the Osprey, the CV-22A, would be to provide long-range extraction capability for SOF. Other SOF missions can be accomplished using existing aircraft. Existing SOF helicopters also could perform many of the extraction missions envisioned for the CV-22A by using aerial refueling to extend their range, by altering concepts of employment and, in some cases, by accepting increased risk. There are a limited number of missions, however, that could not be accomplished using alternative systems and procedures. These are generally higher-risk missions that we are less likely to attempt. The CV-22A is too costly to develop and field just for these missions because it would require developing and fielding the baseline V-22 program first.

Senator WARNER. For the past 8 years this committee has held hearings on the JVX and V-22 programs. We have fully supported the V-22 each year. We have carefully listened to all of the alternatives and each time we have concluded that the V-22 is the most capable and cost effective solution to meet the Marines' troop lift requirement. We have heard testimony from OSD, the Navy, and the Marine Corps. Three of those witnesses during this 8 year period have been Marine Corps Commandants: General Barrow, General Kelley, and General Gray. Each has stated that the V-22 is the Marine Corps' most important aviation program. Each was an infantry officer with the experience of three major wars. Each has said that the V-22 was vital to the Marine Corps mission accomplishment. The requirement has not changed, no new alternative has been suggested, and we have spent nearly $2.5 billion on development of the V-22. Would you tell the committee what new evidence has been found after these 8 years of development that would support a cancellation?

Mr. ATWOOD. The V-22 is a very expensive system and one that fulfills a relatively narrow operational requirement. We fully considered the Marine Corps' needs in reaching our budget decisions.

INCREASE IN PILOT TRAINING COSTS

Senator WARNER. The OSD proposed alternative to the V-22 will require a greater number of pilots than would the V-22 fleet. How much more will this force structure cost for recruitment and training, and how will the Department of the Navy retain them in light of current and projected aviator retention problems?

Mr. ATWOOD. There have been estimates of increased pilot training of as much as $416 million for 20 years (FY 88$). These estimates are based on the single-sling option, not on the DOD-approved program. Using the same estimating rules, the DOD-approved program (double-sling option) would cost about $119 million for 20 years (FY88$). This program estimate for the double-sling option appears to overstate the relevant costs associated with training the required additional aircrews because it is based on using the average cost of $220K per pilot as opposed to the marginal cost of $40K per pilot. We do not believe that cost of the training infrastructure (i.e. buildings, instructors, etc.) should be allocated to these additional training requirements. If one utilizes the marginal cost factor there would be little or no increase in pilot training costs associated with the approved program. According to the Marine Corps, they are not currently experiencing a pilot retention problem.

V-22 OSPREY

Senator WARNER. There have been testimony and numerous articles alleging that the cost comparison between V-22 and the proposed alternatives did not contain several key cost elements which would show that the V-22 is actually less expensive in the longer run than these alternative helicopters. Would you comment on this allegation, and specifically address training costs for the additional pilots required; milcon costs to support the large helicopter force; R&D costs required to bring the H–60 and CH–53 up to combat assault capability; increases in strategic lift costs to support a larger helicopter; the increase in manpower to furnish the force structure required to support a larger helicopter force; and, the suggested higher operating and maintenance costs suspected of the alternative.

Mr. ATWOOD. Some estimates suggest that additional costs should be associated with the conventional helicopter alternative: increased pilot training, Milcon, upgrades to CH–60 and CH–53, strategic/amphibious lift, and higher operations & maintenance (O&M) costs (which includes increased manpower). In all cases, the costs provided by V–22 proponents represent the high end of a range of estimates and are based on the single-sling option. In no case does the Department believe those estimates are an appropriate part of costs that should be considered. Details of that assessment are shown below.

Pilot Training.—The $.416B(FY88$) cost estimate associated with increased pilot training for 20 years applies not to the DOD-approved program, but to the single-sling option considered in the analysis leading up to our decision. As stated in the previous question, we believe there would be little or no increase in pilot training costs associated with the approved program.

Milcon.—The $.2B Milcon estimate is for the single-sling option. This estimate overstates the Milcon costs. In making these calculations, ratios of training squadrons to operational squadrons were used that are higher than now used for the same or similar aircraft. Using the current ratios would reduce the estimate somewhat. Any additional Milcon would not be needed until the alternative fleet had grown larger than the total number of V–22 plus CH–53E aircraft in the V–22 program. That total would not be reached for at least 10 years, and any additional Milcon would not be needed until then. The Milcon estimate is an upper bound since it assumes new hangars and facilities are required for *all* of the increased quantities of aircraft above the V–22 quantities. A site-by-site assessment may indicate that some existing facilities are adequate. Little or no increase is associated with the double-sling option.

Upgrades to CH–53 and CH–60.—We have included $163 million (FY88$) for R&D to develop the CH–60 variant. Much of the total R&D work for the CH–60 has already been accomplished as a part of the H–60 Blackhawk and Seahawk programs. We did not include development costs for the CH–53E, as it is in production. The Department considered and rejected avionics upgrades to the CH–53E and CH–60. However, we will reconsider upgrades if the USMC is willing to trade off aircraft quantity for capability. The avionics funding for the CH–53E and CH–60 alternatives is consistent with the avionics in Army aircraft performing similar missions.

Strategic/Amphibious Lift.—The most recent estimate of these "additional costs not considered by OSD" totals $7.8 billion, and includes $3.7 billion for strategic airlift and $4.1 billion for additional amphibious shipping. Neither the V–22 nor DOD's proposed alternative affects our strategic sealift requirements. Current plans envision either amphibious ships and/or MAC airlift carrying V–22s and helicopters to the theater of operations.

Termination of the V–22 program could engender changes in our amphibious lift program, but not nearly on the scale of those changes suggested. The DOD-approved program would actually reduce "deck spot" requirements by roughly 5 percent, which could lower the cost of the amphibious shipping program. The single-sling option that we also considered would require a modest increase in deck spots, though whether this would translate into additional amphibious shipping is, as of yet, unclear. Estimates that suggest drastically higher amphibious lift costs ignore projected excess in capability after the year 2000 and incorrectly assume that current deck arrangements could not be altered in wartime.

With respect to strategic lift, there is a requirement to use MAC airlift to transport the helicopters of one Marine Expeditionary Brigade's air combat element (as currently configured) to an assembly area incidental to the Norway Prepositioning Plan and also existing plans for airlift of helicopters to support three brigades employed with Maritime Prepositioned Ships. Since the current requirement has not been reduced to take into account V–22 self-deployment capabilities, USAF airlift currently allocated to the mission would most likely suffice to meet the requirements of DOD's proposed CH–53/CH–60 mix.

Operations and Support Costs.—In this case, we are comparing the predicted O&S costs of the V–22 with the actual demonstrated operating costs of the CH–53 and UH–60 class aircraft. Unfortunately, early predictions of operating and support costs often understate actual operating and support costs significantly—for example, actual F-15 and F-16 operating costs are about 80 percent higher than those estimated at comparable early stages of those programs. Again, the estimates of significantly higher O&S costs over a 20-year time frame assume the single-sling option, not the DOD-approved program.

REMANUFACTURE VERSUS NEW PRODUCTION OF F-14D

Senator **Warner**. With possible block obsolescence in mind, which, in your opinion, is a more important program: F-14D new production or the remanufacturing effort; and why do your feel as such?

Mr. **Atwood**. I believe that the F-14D remanufacturing effort is the more important program. With the Navy decision to reduce the aircraft carrier deckload from 24 F-14s per air wing to 20 per air wings, the F-14 inventory will exceed the requirement until the mid-1990s thereby eliminating the need for new production. Because the remanufactured F-14D are much cheaper (approximately one-half the cost) than new production aircraft, we can initiate a very aggressive remanufacture program that would lead, through conversion, to a modernized all F-14D force much sooner than if we maintain a split between new production and remanufactured aircraft. In fact, in the current fiscal environment the only way we have a chance to modernize to an all F-14D force by the year 2000 is through an all remanufacture program. By that time the follow-on aircraft to the F-14D should be in production to meet force needs.

PRICE OF F-14D

Senator **Warner**. DOD has frequently referred to the F-14D as the $75 million airplane. Looking only at the quotient of the dollars saved to the number of aircraft reduced over the FYDP, the price would appear lower. What factors are included, and what really is the price of this aircraft?

Mr. **Atwood**. Several factors have led to different portrayals of the cost of the F-14D. The first is definition. The table below compares two cost figures: (1) recurring unit flyaway—the cost of materials and labor to build the airplane; (2) total procurement unit cost—includes all non-recurring costs plus initial spares. The figure used by DOD is total procurement cost. The second factor obscuring true costs is the mixing of new and remanufactured aircraft. The usual method of allocating all non-recurring costs to new production yields a unit procurement cost of $71.4 million in fiscal year 1990. When new production is eliminated, all non-recurring costs plus production termination costs are applied to the remanufactured aircraft, thus increasing procurement unit cost. Recurring unit costs also increase due to the application of overhead expenses across fewer production units. The following table provides a comparison of costs for new and remanufactured F-14Ds in the original fiscal year 1990/1991 President's budget and the fiscal years 1990/1991 revised President's budget.

FISCAL YEARS 1990/91 ORIGINAL PRESIDENT'S BUDGET

[In millions of dollars]

	1990	1991
F-14D new:		
(Recurring unit flyaway)	51.2	50.6
(Procurement unit cost)	71.4	69.8
F-14D remanufacture:		
(Recurring unit flyaway)	32.1	28.8
(Procurement unit cost)	61.8	42.5

FISCAL YEARS 1990/91 REVISED PRESIDENT'S BUDGET

[In millions of dollars]

	1990	1991
F-14D remanufacture:		
(Recurring unit flyaway)	60.6	43.8
(Procurement unit cost)	143.8	73.2

NAVY AIRCRAFT REQUIREMENTS

Senator WARNER. In fiscal year 1990, the Navy will not produce any aircraft from three of its primary aviation programs: F-14D, A-6E, and EA-6B, waiting for availability of replacement aircraft. With these aircraft remaining in the future inventory for an unspecified period, and the already existing shortfall in EA-6B assets, is the lack of production an acceptable risk?

Mr. ATWOOD. In simple terms, yes, the risk is acceptable. There are sufficient numbers of F-14 aircraft to see us through the next decade, and these aircraft will be updated to F-14D configuration via a remanufacture program that will begin in 1990. By carefully managing our existing A-6E assets, we will be able to meet fleet requirements until the A-12 enters operational service. The EA-6B shortfall can also be managed for the immediate future.

PHOENIX MISSILE

Senator WARNER. At the end of the fiscal year 1990 deliveries, the point of program termination, Phoenix inventories will total approximately 3,700 missiles. Not withstanding that 1,400 of this number are the older "A" version which are not compatible with the F-14 "D" model, it would appear that we have less than two combat loadouts per F-14, should the need arise. How can we bridge this shortfall until the replacement Advanced Air-to-Air Missile (AAAM) becomes available?

Mr. ATWOOD. The risk of conflict requiring expenditure of large quantities of long-range air-to-air missiles in the near-term is judged to be low enough to, at this time, permit a reduction in the acquisition of the Phoenix missile in order to achieve necessary reductions in defense costs. In our judgment, we will have produced a sufficient quantity of these weapons to meet foreseeable requirements after the fiscal year 1990 buy. Additionally, other missile systems available are the AIM-9 Sidewinder, AIM-7 Sparrow, the AMRAAM, and the Phoenix follow-on about the year 2000.

CLOSE AIR SUPPORT TEST PLAN

Senator WARNER. With the reevaluation underway to produce an OT&E close air support test plan that will include night attack capability, shouldn't termination of programs which may support this effort be deferred until the close air support testing is completed?

Mr. ATWOOD. The night attack systems to be tested for close air support (CAS) capability would have different capabilities and be less costly than Lantirn. Lantirn combines a navigation forward looking infrared (FLIR), a targeting FLIR, a terrain following radar, and a laser designator/range-finder into a two-pod system designed for autonomous operations deep in enemy territory. The night attack systems preferred for CAS aircraft, such as Falcon Eye, do not need all of the features in Lantirn and are head-steered FLIRs that provide the pilot with tactical flexibility and night situational awareness by allowing the pilot to look in any direction, and are projected to cost about one-fourth that of Lantirn. Much of the FLIR technology used in Lantirn, however, can be applied in the head-steered FLIR system for close air support.

DIFFERENCES BETWEEN DOD & CBO ESTIMATES

Senator WARNER. Secretary Cheney has provided to the committee an analysis of the differences between DOD and CBO in estimating the fiscal year 1990 outlay effect of the President's defense budget submission. I ask that Secretary Cheney's letter to the Chairman be inserted into the record of this hearing. I will also ask CBO to respond to the comments in the DOD letter and their response will also be provided for the record as soon as it is available. Please briefly explain the major differences between the DOD and CBO estimates.

Mr. ATWOOD. CBO's outlay estimate for fiscal year 1990 is $293.6 billion while DOD's estimate is $289.8 billion, a difference of $3.8 billion. A major reason for the difference between DOD and CBO outlay estimates is due to different methodologies used to calculate outlays. Several of the major differences are as follows: CBO does not consider all relevant factors concerning stock funds; CBO applies outlay rates to budget authority while DOD applies outlay rates to total obligational authority; and historical outlay patterns in military personnel, O&M, and family housing appropriations are interpreted differently in projecting outlay rates for future fiscal years.

THE SECRETARY OF DEFENSE
WASHINGTON, THE DISTRICT OF COLUMBIA

6 JUN 1989

Honorable Sam Nunn
Chairman
Committee on Armed Services
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In our appearances before various committees, Deputy Secretary Atwood and I have been asked a number of times about the difference between CBO and OMB/DoD estimates of FY 1990 outlays associated with the Defense budget now before the Congress. I would like to take this opportunity to provide you with my views on this matter.

Given the difficulty of making accurate predictions of precisely when expenditures will occur, the 1.3 percent difference in the two independently developed estimates would normally not be cause for concern. However, the procedures under which the Congress operates in considering appropriations could cause the outlay issue to result in substantial adjustments to the FY 1990 Defense program. It would be most unfortunate if adjustments were made which neither the Congress nor DoD would support on their merits in the absence of the outlay problem, particularly if, as we believe, CBO's estimates turn out to be overstated.

My staff has been working with the CBO staff to identify the major differences in our estimates and to determine the reasons for the differences. Enclosed for your information is a paper which describes some of these differences.

In these accounts alone, we have identified over $3 billion of methodology differences which we believe cause CBO's total estimate to be overstated. Although we recognize that our method of estimating will not produce precisely correct projections in each account, we are convinced that our methods are sound and our estimates are no less reliable than CBO's.

I am concerned that decisions may be made during the authorization and appropriation process which will be disruptive to the Defense programs without really contributing to the deficit reduction goal. I urge you and your committee to recognize the limitations that exist in accurately forecasting outlays and to avoid potentially damaging changes to the Defense programs based on these estimates.

Sincerely,

Dick Cheney

Enclosure.

OUTLAY ESTIMATING: CBO vs DoD

DIFFERENT METHODOLOGIES YIELD DIFFERENT RESULTS

- CBO first year O&M outlay rates do not accurately reflect actual spending experience of last three years.

- CBO does not consider all relevant factors concerning Stock Funds.

- CBO uses uniform rates for the major military personnel and family housing accounts; DoD uses separate rates for each account.

- DoD assigns more than one outlay rate to certain accounts. Generally, CBO uses one outlay rate per appropriation and further consolidates certain appropriations using fewer outlay rates.

- CBO applies outlay rates to Budget Authority; DoD applies outlay rates to Total Obligational Availability.

- In summary CBO's outlay estimate for FY 1990 is $293.6 billion while DOD's estimate is $289.8 billion, a difference of $3.8 billion. The major differences involve CBO:

  - Not reflecting historical experience when determining their O&M first year outlay rates ($2.1 billion);

  - Not considering all relevant factors concerning the stock funds ($1.0 billion); and

  - Assigning identical outlay rates to the major Military Personnel appropriations even though historical trends indicate different outlay profiles ($.3 billion).

ANALYSIS OF CBO OUTLAY PROJECTIONS

Outlay estimating is not an exact science. A major reason for the difference between DoD and CBO estimates is related to different conceptual methodologies applied when forecasting outlays. Some of those differences are as follows:

OPERATION AND MAINTENANCE

There is a $2.1 billion outlay difference between CBO and DoD in the O&M title regarding first year spending. This difference is partially offset by the decrease in prior year outlays estimated by CBO. Of this $2.1 billion, there are eight separate O&M appropriations which constitute 95% of the first year outlay difference. In each of these appropriations the DoD outlay rate used in FY 1990 is more representative of the historical spending profile than the rate used by CBO. A comparison of the DoD and CBO outlay rate for each of these appropriations result in a higher CBO outlay estimate in FY 1990 for Defense. The rate and associated outlay difference for each O&M appropriation is illustrated in the table below. Based on historical experience, it appears that DoD's first year outlay rates are more reasonable than CBO's for these eight O&M appropriations.

Major First Year Outlay Difference Between OSD and CBO

Navy ($494M)	Percent
1986	71.1
1987	67.7
1988	73.5
DoD 90	73.4
CBO 90	76.0

Marine Corps ($229M)	Percent
1986	72.1
1987	70.1
1988	73.1
DoD 90	71.6
CBO 90	85.0

Air Force ($390M)	Percent
1986	74.7
1987	70.7
1988	76.3
DoD 90	76.3
CBO 90	78.0

Def Ag ($176M)	Percent
1986	87.2
1987	85.1
1988	85.1
DoD 90	83.8
CBO 90	86.0

Army Res($137M)	Percent
1986	80.0
1987	73.7
1988	72.9
DoD 90	72.1
CBO 90	88.1

Navy Res ($110M)	Percent
1986	62.6
1987	61.0
1988	66.7
DoD 90	65.8
CBO 90	77.0

Army Nat'l Gd ($249M)	Percent
1986	80.6
1987	77.6
1988	75.9
DoD 90	75.2
CBO 90	88.5

A.F. Nat'l Gd. ($209M)	Percent
1986	83.5
1987	78.8
1988	82.0
DoD 90	81.9
CBO 90	92.2

REVOLVING FUNDS

There is a $1.0 billion outlay difference in the Revolving and Management Funds. This difference is due to (1) different outlay rates for appropriated amounts in the Stock Funds; (2) effects of operating cash on Stock Fund outlays and (3) CBO's judgment factor.

DoD uses a purchase rate and CBO uses a O&M rate against the amounts appropriated in the Stock Funds. Even though many of the items in the Stock Funds are bought by O&M appropriations, these items have a procurement process similar to the procurement accounts, and the Department feels that the purchase rate is more representative of the outlay profile than the O&M rate used by CBO. The difference between using the purchase rate and the O&M rate results in a first year outlay increase in FY 1990 of $334 million, largely offset by an underestimate of prior year outlays in CBO's estimate.

The difference also reflects the treatment of transfers from the Stock Funds because of excess cash, and the difference between sales and purchases to compute the Stock Fund outlays. Because the philosophy of the Revolving and Management Funds is to be self-sustaining, changes are made each year to prices charged to customers to maintain 11 days of operating cash for the Stock Funds. The operating cash in the Stock Funds during FY 1988 decreased below the 11 day objective. To replenish the operating cash, FY 1990 prices were increased. The increase provides needed cash to the Stock Funds since the customers are being charged a higher price than the cost of the goods bought. The FY 90/91 President's Amended Budget reflects an increase in operating cash to place the Stock Funds at the 11 day operating level. The collection of cash greater than disbursements represents a negative outlay. The net effect to all the Stock Funds was -$407.3 million.

CBO has also added a "judgment factor" to increase their outlay estimate by an additional $.5 billion. The Department feels this adjustment is without merit because it does not consider the current status nor the operating plan of the Stock Funds.

DoD feels that these three differences in estimating Stock Fund outlays result in CBO over-estimating FY 1990 outlays by $1.0 billion. The table below illustrates the outlay estimates for DoD and CBO for the Revolving and Management Funds for FY 1986-1988. In each of the three years, DoD's outlay estimates were more accurate than those of CBO.

Year ($M)	DoD	CBO	Actuals	DoD Diff	CBO Diff
1986	2,124	817	2,877	-753	-2,060
1987	2,714	761	3,454	-740	-2,693
1988	1,359	1,876	1,021	338	855

MILITARY PERSONNEL

CBO's outlay rates for the four major appropriations in Military Personnel have the same first year outlay rate even though they do not expend the same. The table below shows CBO's first year outlay estimate for FY 1990 and actual first year outlay rates for FY 1988 and FY 1987.

Service (%)	CBO 1990	Actual 1988	Actual 1987
Army	96.0	95.3	95.3
Navy	96.0	97.7	96.5
Marine Corps	96.0	96.5	95.7
Air Force	96.0	96.1	97.5

Using the more detailed DoD method results in a projected outlay estimate for these four accounts which is $265 million lower than CBO's for FY 1990.

BUDGET AUTHORITY VS TOTAL OBLIGATIONAL AVAILABILITY

CBO applies their outlay rates to Budget Authority while the Department of Defense applies its outlay rates to Total Obligational Availability (Direct Program and Reimbursable Program). Budget Authority is authority provided by law permitting the government to incur obligations that will result in outlays. The basic forms of budget authority are appropriations, authority to borrow, and contract authority. TOA (Total Obligational Availability) is the sum of budget authority provided for a given fiscal year and amounts being transferred between funds or accounts. Using Budget Authority to compute outlays does not consider the impact of unobligated balance transfers. For FY 1989, the department projects $2.6 billion in unobligated balance transfers. Even though this amount nets to zero within the department, it does have a significant impact on outlays. In FY 1989, almost half of the $2.6 billion will be transferred from slow spending appropriations to much faster spending O&M and Military Personnel appropriations. These transfers have the effect of reducing outlays in FY 1990 and beyond while increasing the outlays in FY 1989.

OTHER DIFFERENCES

DoD divides certain appropriations into sections depending on spending rates. Section codes are used by DoD to differentiate between certain high value programs which outlay significantly different from other programs in those appropriations. DoD uses section codes for all Military Personnel accounts, for Special Programs and Special Update in Missile Procurement, Air Force, and for Selected Activities and Special Update Programs in Other Procurement, Air Force. DoD separates Family Housing into Construction, and Operation & Maintenance/Debt while CBO combines Construction with Operation and Maintenance and Debt. Family

Housing Construction expends around 5% the first year and Operation and Maintenance/Debt expends around 60% the first year. Combining all three categories into one rate will not allow CBO to address any program mix changes occurring in Family Housing. CBO's outlay rate for Army, Navy, Air Force, and Defense Agencies is exactly the same rate even though there is considerable difference in the spending profile for each military department.

SUMMARY

In the FY 1990/1991 Amended Budget, CBO's outlay estimate for FY 1990 is $293.6 billion while DoD's estimate is $289.8 billion, a difference of $3.8 billion. The major differences involve CBO (1) not reflecting historical experience when determining their O&M first year outlay rates ($2.1 billion); (2) not considering all relevant factors concerning the stocks funds ($1.0 billion); and (3) assigning identical outlay rates to the major Military Personnel appropriations even though historical trends reflect different outlay profiles ($.3 billion).

CONGRESSIONAL BUDGET OFFICE
U.S. CONGRESS
WASHINGTON, D.C. 20515

Robert D. Reischauer
Director

November 9, 1989

MEMORANDUM

TO: Mike McCord
Senate Committee on Armed Services

FROM: Mick Miller

SUBJECT: DoD's Comparison of DoD and CBO Outlay Estimates for 1990

This memorandum responds to a comparison of CBO and DoD outlay estimates prepared last June by DoD. (As you remember we responded with a draft memorandum at that time). The estimates for 1990 differ by $3.8 billion or 1 percent--a relatively small amount given the inherent error in forecasting. However, the DoD paper gives misleading impressions about the sources of the difference and CBO estimates more generally. Specifically,

- The DoD paper makes too much of differences in first year outlay rates, especially in O&M. Even if CBO outlay rates are too high in the first year, it would mean that CBO rates are too low in the second year by an equal amount. In other words, redistributing the percentages makes little difference when budget authority changes as little as it has recently.

- The main difference between CBO and DoD outlays appears to be in the estimates of ultimate expenditure or lapse rates--not outlay rates per se. CBO estimates generally assume lower lapse rates than DoD, based on recent experience with relatively stable levels of budget authority.

- To facilitate estimating, CBO combines the O&M accounts with the revolving funds into an account it calls operations. In this way the expenditures and receipts between the customer and revolving fund accounts can be balanced. If CBO errs on the side of estimating too much in terms of revolving fund outlays, it may also err by estimating too little by an equal amount in terms of customer account outlays. DoD's exposition makes no allowance for this trade-off and does not indicate how it must raise outlay rates in O&M to balance pricing policy in the revolving funds.

- The DoD paper is misleading in its observation on the uniformity of CBO outlay rates for military personnel accounts. Diversity does not mean accuracy. If DoD had used the actual rates for either 1987 or 1988, it would have produced an estimate higher than its current estimate for 1990 and equal to CBO's estimate.

Estimating History

The two attached tables show the recent history of outlay estimation. The first table, prepared by OMB, shows that CBO's current year budget estimates have been slightly more accurate than DoD's since 1982. CBO has underestimated current year expenditures for four consecutive years. The second table shows budget year estimates, with adjustments made for changes in budget authority. Again, CBO provides slightly more accurate forecasts of eventual spending. There is only one case of widely disparate estimates, the 1987 budget, when CBO's estimate proved much more accurate.

As the second table also indicates, the forecasting error for both DoD and CBO is generally greater than the $3.8 billion difference between their current estimates for 1990. That difference is, however, one of the larger differences between CBO and DoD budget year estimates of outlays.

A review of recent estimates reveals that when budget authority increases both CBO and DoD overestimate outlays, but when budget authority falls both agencies tend to underestimate outlays. Specifically, the recent trend of underestimates is evident because after 1985, when budget authority peaked:

- CBO has underestimated current year outlays all three years.
- DoD has underestimated current year outlays for two of the three years.
- CBO has underestimated budget year outlays two of the three years.
- DoD has underestimated budget year outlays all three years.

Analysis of estimates for 1990 indicates that the difference between the two estimates is clearly within the estimating error. It is clear, however, that there are some different assumptions at work underlying the estimates.

CBO's Approach to Outlay Estimation

With a new administration and different patterns of growth in DoD budget authority, there is uncertainty about the appropriate outlay patterns for the next few years. DoD apparently uses outlay rates based on a few years of recent history. These rates, for the most part, assume a fairly substantial lapse in budget authority. In years of rising budgets and falling inflation as in the early 1980s, it is likely that the Department will not be able to use all of the resources allocated to it. With stable and falling budgets as we have seen recently, CBO predicts that the lapse in budget authority will fall. Spending patterns for 1988 indicate that these new patterns were in place. The assumption about the amount of budget authority spent is crucial to differences between the CBO and DoD estimates of outlays.

Operations and Maintenance

The differences between CBO and DoD outlay estimates for the Operations and Maintenance accounts is about $1.1 billion. Most of the difference comes in three accounts: Operations and Maintenance, Army($0.6 billion), Operations and Maintenance, Navy($0.3

billion) and Operations and Maintenance, Defense Agencies($0.1 billion). These differences come primarily from the difference in the assumption for the lapsing funds. CBO first year outlay rates are higher, based disproportionately on the recent experience of 1988, a year when outlay rates were high. For all three accounts, unexpended balances were lower at the end of the year than they had been at the end of the previous year even though 1988 budget authority exceeded 1987 budget authority. This indicates that a greater portion of available funds are being spent. About half of the estimating difference caused by different first year outlay rates is offset by the lower outlays from prior years. This occurs because of the consistent application of outlay rates from year to year.

The rest of the difference comes from CBO's assumption that a higher portion of 1987, 1988 and 1989 budget authority will be spent. CBO's outlay estimates are higher because it assumes that a higher proportion of total budget authority will be spent.

CBO applies outlay rates to budget authority. These outlay rates are based on budget authority and outlays from first year budget authority. One of the reasons for the difference in outlay rates between CBO and DoD is that DoD's rates are based on total obligational authority(TOA). However, contrary to the inference in DoD's paper, it does not matter whether outlay rates are computed as a fraction of budget authority, total obligation authority or obligations as long as they are applied consistently with their derivation.

Revolving Funds

The $1 billion difference in outlay estimates for revolving and management funds does represent a judgement factor on the part of both estimators. Outlays from these funds generally have little relationship to the budget authority appropriated for the year. Instead, they move along with the Operations and Maintenance accounts. CBO's estimates of outlays for "Operations", the sum of the Operations and Maintenance and Revolving Fund accounts, must be consistent with empirical evidence for spending in those accounts. Evidence from the second half of 1987 and the whole year of 1988 indicated sharply increased operations spending for the entire Defense budget. By the middle of 1987, $7 billion per month had become commonplace. Outlays for the Operations accounts were running much faster than the budget authority appropriated for Operations and Maintenance would warrant.

DoD's assertion that there will be increased revenues into the funds in 1990 becaus of a change in pricing policy indicates why the revolving funds and operations accounts mus be projected together. Without detailed knowledge of future pricing policy, a combined projection for the two accounts is made. While DoD claims a $0.5 billion savings to the revolving funds, they are silent about where those outlays appear in the Operations and Maintenance accounts.

Procurement

The biggest estimating difference is in the procurement accounts where DoD projects $2 billion less outlays than CBO. DoD consistently assumes lower outlays from prior year budget authority than CBO. DoD's failure to find fault with CBO's procurement estimates suggests that CBO's estimates for these accounts are reasonable, given the detail that DoD examined other accounts.

Most of the $2.1 billion difference between CBO and DoD for the procurement accounts reflect DoD's relatively slow spending of prior year outlays. While some of the difference in these accounts can be explained by DoD's higher first year rates, which leave less to be spent in subsequent years, the main explanation is, again, the amount of funds left unspent. CBO expects about a 4 per cent lapse for procurement accounts. Early years of the defense buildup had a higher lapse rate at least in part because of misprojections of inflation.

Two accounts--Aircraft Procurement, Air Force ($0.9 billion) and Aircraft Procurement, Navy ($0.9 billion)--explain most of the difference. Discussions with DoD indicate that most of that difference comes from the spend out of budget authority from 1986 and earlier. For the two accounts, CBO is assuming about $1.7 billion more outlays than DoD for funds from those years. There was about $17 billion left in unexpended balances from the two accounts at the beginning of 1989. Both CBO and DoD expected about $7 billion to spent in 1989. DoD estimates about $2.5 billion for 1990, CBO estimates about $4.2 billion. This difference is illustrative of the difference between the two views on the lapse rate.

Military Personnel

DoD reports actual Military Personnel outlay rates for 1987 and 1988. These rates are certainly more detailed than the standard rate applied by CBO. If this led to some accuracy it might be useful. If either the 1987 or 1988 actual rates were applied to the four accounts instead of the rates used by DoD for their estimate, their outlay estimate would be higher by about $0.4 billion, making it virtually identical to the CBO estimate.

ATTACHMENT

ATTACHMENT 1

DEPARTMENT OF DEFENSE (051) OUTLAYS (In billions of dollars)

Budget Year	Current Year Budget Forecast Administration	Current Year Budget Forecast CBO	Actual	Estimating Error Administration	Estimating Error CBO	Percent Forecast Deviation Administration	Percent Forecast Deviation CBO
1982	182.8	186.1	182.9	-0.0	3.3	0.0	1.8
1983	208.9	208.4	205.0	3.9	3.4	1.9	1.7
1984	231.0	227.9	220.8	10.2	7.1	4.6	3.2
1985	246.3	245.1	245.4	0.9	-0.3	0.4	0.1
1986	258.4	262.1	265.6	-7.2	-3.5	2.7	1.3
1987	274.2	273.5	274.0	0.2	-0.5	0.1	0.2
1988	277.3	279.3	281.9	-4.6	-2.6	1.6	0.9
Average 1982-88				0.5	1.0	1.6	1.3
Absolute value average 1982-88				3.9	3.0		

Source: Office of Management and Budget

ATTACHMENT 2

DEFENSE FUNCTION (050) OUTLAY COMPARISON: BUDGET YEAR ESTIMATES AND ACTUALS (In billions of dollars)

		Estimated Outlays		Actuals		Imputed Outlay Estimates a/		Estimating Error		Absolute Percent Error	
Budget Year	BA Request	Adminis-tration	CBO	BA	Outlays	Adminis-tration	CBO	Adminis-tration	CBO	Adminis-tration	CBO
1981	161.8	146.2	148.9	182.4	159.8	157.9	160.6	-1.9	0.8	1.3	0.6
1982-Carter	200.3	184.4	187.1	218.7	187.4	181.8	184.5	-5.6	-2.9	3.1	1.6
1982-Reagan	226.3	188.8	195.3	218.7	187.4	186.2	192.7	-1.2	5.3	0.7	2.7
1983	263.0	221.1	222.9	245.8	210.5	213.9	215.7	3.4	5.2	1.5	2.3
1984	280.5	245.3	244.7	265.2	227.4	239.9	239.3	12.5	11.9	5.1	4.8
1985	313.4	272.0	273.5	294.7	252.7	265.5	267.0	12.8	14.3	4.7	5.2
1986	322.2	285.7	284.4	289.1	273.4	270.6	269.3	-2.8	-4.1	1.0	1.4
1987	320.3	282.2	296.7	287.4	282.0	268.6	283.1	-13.4	1.1	4.7	0.4
1988	312.0	297.6	298.3	292.0	290.4	286.8	287.5	-3.6	-2.8	1.2	1.0
Average 1981-1988								0.0	3.2	2.6	2.2
Absolute Value Average 1981-1988								6.4	5.4		

Source: The Congressional Budget Office

a. These two columns contain outlay estimates that are imputed from Administration and CBO estimates for the request compared with actual appropriations. In other words, the outlay estimates for the request were raised/lowered consistent with actual increase/reductions contained in the final appropriations--the resulting lower outlay estimates are the imputed estimates.

EFFECT OF ESTIMATING DIFFERENCES

Senator WARNER. Please also explain the effect of these estimating differences on the defense program. In other words, if the differences cannot be resolved, what actions might this committee be forced to take in our upcoming markup to eliminate the "excess outlays" under CBO's estimate?

Mr. ATWOOD. Making accurate predictions of precisely when expenditures will occur is not an exact science. A 1.3 percent difference in the two independently developed estimates is less than 2 percent considered to be within estimating error given the variables and unknown factors used in the overall calculations. However, the Department is hopeful that this difference can be reduced even further once negotiations with CBO begin later this month. Taking these two factors into account it would be premature to take action in fiscal year 1990 during markup at this time.

Senator WARNER. What efforts has DOD made to date to resolve these differences?

Mr. ATWOOD. The Department is negotiating with CBO to resolve the different methodologies used in estimating outlays by exchanging rate information in hopes of adopting a single approach to estimating outlays.

Senator WARNER. What steps do you intend to take, or would you recommend for this committee, in order to prevent such a disagreement in future years?

Mr. ATWOOD. The Department feels that no action need be taken by this committee. Through negotiations with CBO, the Department is hopeful that one set of outlay rates can be established, thus eliminating any future outlay differences.

Senator WARNER. What "margin of error," based on historical data, would you find acceptable in estimating outlays?

Mr. ATWOOD. When estimating outlays the margin of error acceptable for the Department of Defense is 1 to 2 percent.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

RESERVE FORCES

Senator THURMOND. Several Members of Congress and a member of the Reagan administration have suggested that the active forces be reduced and their missions given to the Reserves. Allegedly, this will result in significant savings. Although I am a strong proponent for the Reserve forces, I am somewhat skeptical of the anticipated savings that have been quoted. In my judgment, there would have to be significant one-time investment in manpower, modern equipment, training, and facilities to permit the Reserve forces to assume these additional active duty missions. Has the Department reviewed the possibility of shifting missions to the Reserves? What savings can be anticipated by making such a move?

Mr. CHU. The Department of Defense continually reviews the mix of active and Reserve forces to determine the most cost-effective use of our limited resources. The option of moving additional forces into the Reserves has different economic effects depending on the service and the mission. Consequently, there is no general answer to your second question. A few examples may help to make this clear:

In the case of the Air Force, we could transfer additional tactical fighter/attack aircraft to the Reserves without forming any new Reserve units by simply bringing existing Reserve units up to full strength. This would incur some conversion costs. Savings would accrue immediately because Reserve fighter units are manned, for the most part, with experienced pilots and can maintain combat proficiency with fewer flying hours per month than active units. If bases were also closed as a result, additional savings would accrue. However, there is a downside to this option as well: we would probably have to move aircraft from forward locations to maintain an adequate rotation base between CONUS and overseas forces. Such a move could adversely affect our alliances and our strategy of forward defense since fighter/attack aircraft provide the first line of defense against enemy offensives on the ground and in the air. In addition, before transferring additional fighter/attack aircraft to the Reserves, we would have to examine carefully the ability of that new force mix to support rapid deployment commitments and to satisfy increased Reserve component demands for experienced pilots leaving a smaller active force. We are deferring action on this approach.

In the case of Air Force strategic airlift and refueling, the situation is somewhat different. There is not much economic benefit in moving active aircraft into the Reserves because costs are a function of flying hours, and in these mission areas, flying hours are a function of demand as opposed to proficiency. Other factors, however, may encourage us to move aircraft into the Reserves; for example, we will be transferring C-141s to the Reserves as the C-17 enters the active forces.

Since most Army combat service support is already in the Reserves, any additional Army transfers would probably involve combat forces. If we want to maintain our current ratio of CONUS to overseas forces, we would have to withdraw some forward forces as part of the transfer. Such a move could affect our alliances and our strategy of forward defense.

The Navy active/Reserve mix is sensitive to deployments and ship overhaul schedules. In the past year we elected to move 24 frigates into the Reserves. These moves will be completed by the end of fiscal year 1993 and will save about $130 million annually. Before additional transfers are considered, we should assess our capability to meet deployment constraints and to man these planned reserve ships.

In summary, the active/Reserve mix question has to be approached on a case-by-case basis; each mission imposes different constraints, and each service is unique. Savings must also be calculated on a case-by-case basis.

DIFFERENCES BETWEEN DOD AND CBO ESTIMATES

Senator THURMOND. The CBO estimates that the current FYDP contains amounts that exceed the President's budget by $45 billion. At your confirmation hearing you were asked what you and the Department could do to eliminate this large difference. At that time you diplomatically deferred answering the question. Are you prepared to answer that question now?

Mr. O'KEEFE. The $45 billion shown in the FYDP as a negative "Program Estimates" entry over fiscal years 1992–1994 is only part of the calculation previously described in Mr. Cheney's letter to Congressman Ireland. The other part is the sum of $23.3 billion shown as a positive "Unanticipated Requirements" entry for the same 3 years. That "wedge" lacks specific programmatic content, which by definition does not exist at present. The real size of the fiscal years 1992–1994 "negative wedge" that concerns you is therefore not $45 billion, but $21.7 billion, which is slightly over 2 percent of the program total for those years.

With regards to the $21.7 billion difference, the DOD program for fiscal years 1992–1994 was consistent with the budget topline for 2 percent annual real growth, however, it did not contain the same level of detail or same degree of precision as for the budget years. Experience has shown that over the next several years unanticipated requirements will materialize but these will be more than offset by reductions to the programs now planned. We have found that as an outyear program becomes a budget proposal, it should be possible to "scrub" the net cost of the program by 2 to 3 percent.

As you know, the Department had just over 2 months to identify defense budget reductions agreed to by President Bush. The primary focus has necessarily been on the fiscal year 1990/fiscal year 1991 biennial budget, although we have also reduced fiscal years 1992–1994 programs significantly. The Secretary will decide whether having a higher outyear program is desirable, and if so, by what amount it should be higher, when he develops his first complete defense program.

V-22 OSPREY

Senator THURMOND. Navy and Marine Corps witnesses have testified before Congress this year that the long-range costs of the V-22 are no greater than a mix of helicopters using old technology. I know that the DOD studies show savings of $5 billion over 20 years. The Navy Department says the savings would be more like $3.2 billion. Both are based on using a helicopter lift method which the Marines say is not suitable for tactical assault. Have you found any problems with the cost figures that DOD used when making the decision of the V-22 several months ago?

Mr. ATWOOD. The capability to double-sling High Mobility Multipurpose Wheeled Vehicles (HMMWV) has been demonstrated. A test conducted by the Naval Air Test Center in 1985 concluded that a device used to rig two HMMWVs for lifting "exhibits excellent potential for future use to increase tactical flexibility of USMC HMMWV assests." We may not be able to double-sling HMMWVs in all operational situations; however, to plan now to never do so would be an extreme case. We have checked and rechecked the cost figures and we believe the cost analysis used to support the decision to cancel the V-22 to still be valid.

COMPARISON OF PROGRAM TERMINATIONS

Senator THURMOND. Mr. Chu, you were involved in the development of both the Reagan budget and the Bush budget. In the development of the Reagan budget, were there plans to terminate any of the same programs that Secretary Cheney terminated? If so, why were they not terminated at that time?

Mr. CHU. Termination of the F-15E, F-14, and V-22 programs were discussed during the review of the defense program that preceded preparation of the fiscal years 1990-91 Reagan budget. Proposals that called for canceling some Army aviation programs were discussed as well.

Every budget is based upon a 5-year defense program that seeks to balance requirements for modernization, readiness, and the size of the force structure within the overall resource levels set by the President. The Reagan defense program underlying the fiscal years 1990-91 budget proposals was developed within limits somewhat larger than those of the Bush program. President Bush agreed to substantial changes in the level of defense funding; these reductions called for $10 billion cuts in fiscal year 1990 and fiscal year 1991 and for a total reduction of $64 billion over the fiscal years 1990-94 period. To meet these reductions while maintaining a sensible balance between modernization and other vital aspects of the program, such as readiness, we chose to terminate some programs in order to maintain the remaining procurement programs at reasonably economic production rates.

PERSONNEL VACANCIES

Senator THURMOND. Although budget issues are the focal point of this hearing, I want to redirect the focus temporarily to the personnel vacancies. The Defense Department has not yet filled its leadership positions. By my count, the Army still does not have a new Secretary, no Under Secretary of any of the services has been nominated, the Acquisition Deputy position has not been filled. The list appears endless. What impact are these vacancies having on the operations of the Department's programs and when do you anticipate this committee will get nominations for these critical positions?

Mr. ATWOOD. The Department has experienced some difficulty in filling certain key executive level positions. Among the reasons for this are: legal restrictions on post-employment activities of senior officials after their departure from government service; major salary reductions that frequently accompany the transition from private to public sector employment; federal personnel financial disclosure requirements; and, the requirement that candidates for selected positions divest themselves of specific financial holdings or enter into blind trusts in order to remove or reduce the possibility of conflicts of interest. The net effect of these factors is to reduce the pool of top level executives who are willing to enter public service in the Department of Defense.

An outstanding candidate has been identified for the position of Under Secretary of Defense for Acquisition. The process that will lead to his selection has been initiated. Other executive level appointments are being processed for similar action. In the meantime, the functions and responsibilities assigned to unfilled positions are generally being carried out by deputies or individuals serving in acting capacities. As the full DOD senior management term comes on board, progress on acquisition and other DOD management initiatives currently underway will be expedited.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

SOVIET MILITARY HELICOPTER PRODUCTION

Senator MCCAIN. Isn't Soviet military helicopter production still at 400 helicopters a year, and isn't the U.S.S.R. now deploying the AH-64-like Mi-28 Havoc and a new armed assault helicopter called the Mi-38?

Mr. ATWOOD. Soviet production of military helicopters is currently estimated at around 400 per year. The Defense Intelligence Agency does not believe the Soviets have started to deploy either the Mi-28 or the Mi-38. Officials of the Mil Design Bureau, attending the 1989 Paris Air Show, stated that the Mi-28 on display was one of three flying prototypes. Regarding the Mi-38, production and deployment are not anticipated until sometime during the latter half of the 1990s.

AH-64 AND LHX

Senator MCCAIN. Would you discuss the risk analysis you went through deciding to terminate the AH-64 and to "bet" on the success of the LHX?

Mr. ATWOOD. The AH-64 procurement was terminated after fiscal year 1991 strictly for affordability reasons. The Army has done substantial risk analysis on the LHX program and we feel we can achieve an acceptable security posture with the current Apache procurement objectives.

The Army and OSD are not "betting" on the success of the LHX. The LHX program is a stable program with firm requirements. It continues to be on schedule and within cost goals. The technological advances that this aircraft will incorporate to allow it to meet its mission requirements and defeat the future threat are judged to be low to moderate risk. These technologies either have been or will be demonstrated and tested prior to LHX entry into full scale development with the goal of assuring that all are of low risk. The Army has made the LHX program its number one R&D program and has every confidence that the LHX will be a success.

Senator McCain. Isn't it true that the AH-64 is the only advanced attack helicopter in production in the west, that the LHX is not a replacement?

Mr. Atwood. That is true. The LHX will not replace the AH-64. Rather, the LHX will initially replace the AH-1S (Cobra) and the OH-58C. After that, the LHX will go into attack units to complement the AH-64s.

Senator McCain. Wouldn't the AH-64 be an ideal system for helping to compensate for the impact of cuts in United States and allied conventional forces?

Mr. Atwood. The AH-64 Apache is a very effective system but decisions must be made in the context of affordability and budget reductions. We are buying Apaches now and will transition in the future to an even more effective helicopter. Our recommendations on Army aviation support these plans to transition to a more effective force, by procuring sufficient numbers of modern AH-64s and UH-60s, and supporting the centerpiece of Army aviation modernization, the Light Helicopter Program or LHX.

Senator McCain. Couldn't we actually save money in fiscal year 1990 and fiscal year 1991 going to the multiyear production program Congress directed last year at a rate of 60 helicopters per year?

Mr. Atwood. That multiyear program is no longer feasible because we plan to terminate AH-64 procurement after the fiscal year 1991 procurement. The AH-64 termination was a difficult choice made in light of the current fiscal constraints and the desire to continue funding the development of the LHX helicopter at a level that will allow fielding beginning in fiscal year 1997 and to continue production of the UH-60 helicopter at an economic production rate. Termination of the AH-64 after fiscal year 1991 will save the Department over $1.6 billion in fiscal years 1992-94 while still providing a formidable force of 807 AH-64 helicopters in 40 battalions.

Senator McCain. What risk analyses have been completed on the LHX? What were their conclusions? What risks do you currently see in cost, performance, and threat terms in relying on this aircraft?

Mr. Atwood. Risk analyses and risk reduction efforts for LHX have been conducted on a sustained basis since fiscal year 1984. Three major risk analyses efforts have been conducted to date. The LHX Cost and Operational Effectiveness Analysis (COEA) completed in 1987 considered all feasible alternative systems to meet the Army's requirement for a lightweight, combat effective system to defeat the 21st century Soviet threat, both day and night and in adverse weather during the conduct of armed reconnaissance, attack, and air combat missions. The COEA thoroughly examined the AH-64 and other systems compared to an LHX system from technical risk (both airframe and mission equipment package), combat effectivenesss, cost, producibility, and operational supportability aspects. The COEA concluded that risks associated with LHX development were clearly acceptable (moderate or lower) and that the LHX provided the most cost effective system to fulfill Army requirements. Separate and independent analyses were conducted for the Secretary of Defense by the Institute for Defense Analysis and the Rand Corporation in 1987. These studies also concluded that risks associated with the program are acceptable and that a lightweight LHX advanced helicopter with an integrated mission equipment package is the preferred design solution.

Program cost risk is low. The Army already achieved firm unit production cost and operating cost guarantees for the LHX T800 engine which better original requirements. The LHX aircraft unit production cost requirement is likewise achievable. The validity of the cost requirement has been confirmed by independent government and industry analyses. Industry competitors have been given design flexibility during the development process to achieve the best system which meets cost and weight requirements. A significant product of the ongoing competitive demonstration/validation phase is a life cycle cost commitment from each participating team with their full scale development proposals. The level, depth, and firmness of these industry cost commitments will be integral to the source selection process prior to entering full scale development.

Performance risk is assessed for the air vehicle, mission equipment package, and engine.

1. *Air Vehicle.* Overall air vehicle risk is assessed as low to moderate. The LHX air vehicle will incorporate significant technology improvements that have been successfully demonstrated in LHX concept exploration, Government technical base, and industry programs.

2. *Mission Equipment Package (MEP).* Overall MEP risk is assessed as moderate. The primary subsystems in the MEP that incorporate advanced technology are the VHSIC mission computer, target acquisition, and night vision pilotage system. Each of these risk areas is being addressed with breadboard/brassboard hardware demonstration of essential technologies prior to full scale development.

3. *Engine.* Overall engine risk is low. The T800 engine development has proceeded smoothly on cost and schedule. With over 8,000 hours of engine testing, the engine has met or bettered all performance, supportability, and cost goals.

The risk associated with defeating the threat is low. The LHX will be small, fast, lightweight, and operationally effective against threat systems of the 21st century. To achieve its objectives, the LHX program is structured to ensure capability of performing designated missions in the postulated threat environment by the use of advanced technology with total aircraft system integration. LHX will be effective in adverse weather, night, NOE operations; and nuclear, biological, and chemical, and electronic countermeasures environments.

Senator McCAIN. Mr. Atwood and Mr. Chu, one of Secretary Cheney's premature program terminations was the Army's AH-64 Apache attack helicopter. Instead of buying 300 more Apaches, as planned by the Army and approved by DOD last year and up through the fiscal year 1990 Reagan budget, only 132 will be bought over the next 2 years and the program will be terminated. This reduction of 168 attack helicopters will force the Army to reduce its modern attack helicopter force structure by seven battalions, from 47 to 40, or 15 percent. My question is whether there is a perceived reduction in the potential threat that justifies a 15 percent reduction in Apache force structure at this time?

Mr. ATWOOD and Mr. CHU. It is always difficult to gauge changes in the perceived threat. Accordingly, we remain skeptical until changes can be observed on the ground. Nevertheless, we must seek a prudent balance between near and long term capabilities. Our Army aviation plans do that. Our plans for the AH-64 place the most modern equipment in those units earmarked for early deployment to Europe. These plans also help ensure that in the future the LHX will be able to provide additional firepower in AH-64 units as it replaces the OH-58.

Senator McCAIN. Mr. Atwood, the Apache is widely recognized as the world's premier attack helicopter. It has good aircraft performance—that is, range, speed, weapons payload, and agility, it has a true night and marginal weather attack capability, which are excellent times for enemy armor to attack, and it has a built-in toughness to survive enemy fire. It is the only true night/bad weather attack helicopter in production in NATO at this time. Considering these outstanding capabilities, we also need to consider the fact that new Apache batallions added to the Army's force structure are displacing AH-1S Cobras in that force structure—and the Army estimates that the Apache give at least a several-fold increase in overall anti-armor capability as compared to the Cobra. Again, this points out the fundamental issue with the Apache production termination—what justification is there for a 15-percent reduction in Apache force structure?

Mr. ATWOOD. The Army had to make some tough choices to stay within the President's budget guidelines. Trade-offs made supported the best security posture achievable. Termination of AH-64s still procures 807 aircraft which supports 40 of the 47 resourceable battalions. Assuming all 40 battalions made it to the fight, this equates to a 15 percent reduction in armed helicopter tank killing capability, however, five of the original AH-64 battalions did not arrive until after D+60 which makes the real reduction 3 percent. This is an acceptable near-term risk that will be offset by the fielding of LHX in fiscal year 1997.

Senator McCAIN. I understand that the future LHX light attack helicopter is viewed as complementing the Apache in the Army's helicopter force structure when it goes into production. However, it will not be ready for high volume production before 1998, at the earliest, under the present optimistic development schedule, when considering the risks inherent in this very high technology aircraft development. That would leave a 5-year production gap with no warm attack helicopter production line going in the United States—or in all of NATO for that matter. This freak storm in Texas last month should serve as a warning against closing down existing production lines of our first-line combat weapons systems if there is a basic shortfall in the force structure. How do you feel about having no on-going attack helicopter production line in the mid-1990s?

Mr. ATWOOD. The Army identified the LHX as the key to aviation modernization. With that, some tough choices had to be made. Affordability became the major issue. I think that the risks of not having an on-going attack helicopter production line in the mid-1990s are offset by the introduction of the LHX in 1997.

Senator MCCAIN. If the decision was made to buy the 300 Apaches the Army needs, this could be done with a 5-year multi-year procurement, or MYP, at a savings of 13 percent when compared to annual procurements. That 13 percent means we would get 39 Apaches "for free," so to speak, as compared with annual procurements, or enough "for free" to equip two battalions. Does it not make sense to you to go ahead with the five-year MYP and buy 300 Apaches since they are needed and there is no good rationale for cutting back the Apache force structure?

Mr. ATWOOD. The decision to terminate Apache procurement after fiscal year 1991 was based strictly on affordability. Within the context of a changing defense funding picture the Army cannot afford 300 more Apaches.

F-14D AND NATF

Senator MCCAIN. What risk analysis have you done on the impact of canceling production of the F-14D?

—In terms of inability to replace combat losses until the NATF is in production and deployed?

—In terms of delays, weight growth, and cost growth in the NATF?

—In terms of the fact that the F-14D design is still unproven and an aircraft with a rate life of 6,000 hours is now projected to last from 7,500 to 9,000 without any cost or technical evaluation?

Mr. ATWOOD. There has been no formal risk analysis on the impact of canceling production of the F-14D in relation to NATF. Given the current political and fiscal climate, the combat loss risks without F-14D new production are considered acceptable. NATF is not expected to be in production prior to the year 2000, however the Navy remains fully committed to NATF with Air Force and the program is progressing as planned. Weight and cost estimates of NATF are unknown at this time. The initial service life of the F-14 was 6,000 hours which was established through design and initial fatigue testing. This testing is ongoing and progressing toward establishing a higher service life threshold which is currently near 7,500 hours. Continued testing and cost benefit studies are ongoing toward increased fatigue testing and a 9,000 hour service life.

Senator MCCAIN. What risk analyses have been completed on the NATF? What were their conclusions? What risks do you currently see in cost, performance, and threat terms in relying on this aircraft?

Mr. ATWOOD. NATF is in the early stages of development. Risk analysis in all areas, including cost, performance, and threat, will be addressed over the next few years.

RISKS ON UNPROVEN HIGH TECHNOLOGY SYSTEMS

Senator MCCAIN. What overall risk analysis did you make in relying on so many unproven high technology systems? What cost, performance, and scheduling delays? Don't we risk being ready for war in 15 years at the expense of capability in much of the 1990s?

Mr. ATWOOD. The Defense Acquisition Board (DAB) conducts a vigorous review of each major weapon system we intend to procure. The DAB relies on the evaluations of technology experts to guide its decisions on which systems have progressed to the production stage and which must be further developed. At the same time, the DAB also receives cost and performance evaluations that help me form an overall estimate of the risks we face in fielding each of these weapon systems.

While cancelling the AH-64, F-14D, and F-15E programs leaves us without warm production lines for these weapons, we do have a large inventory of them on which we can rely for many years. Furthermore, cancelling these programs is a fiscal necessity if we are to continue modernizing our other weapons systems. Our responsibility is to provide the best defense we can within the funds that are appropriated. That means we must balance overall modernization goals with the readiness and size of our forces.

PROGRAM TERMINATION DECISIONS

Senator **McCain**. How valid would your current program termination decisions be if we only received constant funding at the fiscal year 1990 level through fiscal year 1994? Would you make the same choices? If not, what specific changes would you make?

Mr. **Atwood**. Holding the Department of Defense budget annually to the level requested for fiscal year 1990 would require roughly $50 billion in further reductions during the 4 years (fiscal year 1991 to fiscal year 1994). That amount would almost double the amount that has just been reduced (about $64 billion) in the amendment to the fiscal year 1990 program that has just been submitted to Congress. The thorough program review that we have just conducted to derive the sources for the $64 billion reduction did not include any consideration of larger reductions of the order of $100 billion or more, as now suggested. Accordingly, it would be speculative and potentially misleading to suggest how further major program reductions would be accommodated. It is, of course, theoretically possible that we might decide to terminate different programs if we were looking at much deeper overall budget cuts, but I consider this unlikely. It is more probable that we would be convinced of the necessity to cut the programs we did, and in addition we would have to put other programs on the terminations list.

Senator **McCain**. How valid would your current program termination decisions be if we are forced to cut $150 billion more from the FYDP as the GAO and CBO have suggested during fiscal year 1991 through fiscal year 1994? Would you make the same choices? If not, what specific changes would you make?

Mr. **Atwood**. As the Department's witnesses stated during the hearing, the Department considers that the sources of the $150 billion reduction discussed in GAO and CBO statements are invalid as a basis for any budgetary decisions now. The Department has followed OMB guidelines on inflation; the Department considers that anticipation of a "constant-dollar freeze" is unsupported by any political agreement on the part of the Executive Branch; and the Department has established an estimative process (the "Planning Estimate") to account both for further program scrubs and unanticipated cost growth. For these reasons, we have not conducted any review of the specific program changes that would be made if a $150 billion reduction were imposed on the fiscal years 1990-1994 FYDP. Again, if confronted with the need to make deeper cuts, we probably would choose the same programs for termination and also add others.

REALISTIC 5-YEAR PLANNING PROJECTIONS

Senator **McCain**. There have been press reports that Secretary Cheney has directed the Comptroller to produce more realistic 5-year planning projections. Can you describe any such changes, and explain what you have learned in reviewing possible problems with the current estimates?

Mr. **Atwood**. We have made no changes to the outyear planning projections. The DOD Comptroller has alerted the military departments that we will conduct a review of the fiscal year 1991 budget, including consequences for the outyears of changes to fiscal year 1991. At this time we have no plan to adjust the overall DOD funding projections.

LONGER TERM PLANNING AND BUDGETING DATA

Senator **McCain**. Congress has directed that the current FYDP be submitted to Congress, but it has not established any procedures for integrating such longer term planning and budgeting data into the budget submission or testimony to Congress. Could you describe the Department's recommendations for establishing such procedures?

—Would the Department recommend a simpler or different approach to providing such data than the current congressionally mandated version of the FYDP?

—Is there some summary approach to reporting on the current and planned costs of United States forces for the defense of NATO, the defense of the Pacific, and power projection in other regions that would provide more detail on force plans and costs for key mission areas?

—What current long term projections does the Department make of the development and procurement costs of major weapons systems and munitions? How far into the future do these projections go?

Mr. **Atwood**. As Secretary Cheney stated in his testimony before this committee in May, certain elements of our staff are now studying ways—such as using a mission orientation—in which the DOD program and budget might be presented in more meaningful terms, both for internal review purposes and to Congress. This work is in its initial stages, however. Should the results be promising, we will then be in position to start discussing possible changes in congressional review procedures that would give you a better understanding of the content of, and rationale for, the Defense program.

Regarding reporting on the costs of our forces for defense of NATO and other regions, as you are well aware, the Department is required by law to report both force levels and projected costs for defense of NATO and other regions in a fair amount of detail and according to formulae specified in the law.

Finally, the Department has provided Congress with detailed acquisition information on all major weapon systems in the Selected Acquisiton Reports, or SARs, for many years. These reports include planned development, procurement, and military construction data for each major system for all the years over which we plan to buy that system.

REMANUFACTURE VERSUS NEW PRODUCTION OF F-14D

Senator McCain. I understand that remanufactured F-14s will only have approximately half the life of a new production F-14D (3,500 hours versus 7,500 hours). I would like to know the true costs of the planned remanufactured aircraft over the next 5 years, taking into account: the loss of business base to Grumman on the F-14 program; increased costs of the E-2C and EA-6B over the next 5 years; termination costs of the F-14 new-production aircraft; and costs of preserving the production tooling and sustaining engineering capabilities at Grumman in case you want to reinstate production 1 or 2 years from now. If you have not already computed these costs in your analysis to close the new-production line, I would like to know why.

Mr. Atwood. The following cost estimates include effects of the loss of business base to Grumman as a result of cancelling the F-14D new production after fiscal year 1989.

The total procurement cost of the remanufactured F-14D aircraft in millions of then-year dollars is:

	Fiscal year				
	1990	1991	1992	1993	1994
Quantity	6	12	24	48	60
Cost	863	879	1364	2136	2421

The minimum increase in cost of the E-2C and EA-6B remanufacture program in millions of then-year dollars is as follows:

	Fiscal year				
	1990	1991	1992	1993	1994
E2C quantity	4	9	9	9	9
E-2C delta cost	1.5	1.5	1.5	1.5	1.5
EA-6B quantity	0	3	9	12	12
EA-6B delta cost	1.0	1.0	1.0	1.0	1.0

The estimated cost to discontinue the F-14D new-production advance acquisition contract (AAC) is $160.0 million. This includes $70.0 million sunk in AAC costs and $90.0 million to shut down the Grumman production line. In addition, Grumman has not yet settled the fiscal year 1989 contract for 12 new-production F-14Ds, and cancelling production after 1989 will have a cost impact of as much as $105 million in fiscal year 1989 dollars.

The expense of the preservation, storage, or disposition of new production tooling is included in the $90.0 million shutdown cost and was considered in our analysis to close the new production line. This number, however, understates the cost to restart new production after a 1- or 2-year production gap. It is also highly likely that a number of vendors and subcontractors would not retain their capability to supply F-14D components and subassemblies through a substantial hiatus, which would cause additional costs to identify, start up, and qualify replacement vendors and subcontractors.

Senator McCain. Under the above ground rules, what is the cost of the new production F-14D versus a remanufactured F-14D? What is the procurement cost per airplane life remaining? By the flight hours remaining?

Mr. Atwood. The following cost estimates of F-14D new production can be compared to the cost of F-14D remanufacture presented in question above.

The total procurement cost of the new-production F-14D aircraft, assuming no concurrent remanufacture, in millions of then-year dollars is:

	Fiscal year				
	1990	1991	1992	1993	1994
Quantity	12	12	12	12	12
Cost	1144	1045	1134	1323	1425

The average unit cost of 60 new F-14Ds manufactured in fiscal years 1991-94, assuming no concurrent remanufacture, is $101 million in then-year dollars. The average unit cost of 150 remanufactured aircraft, made over the same period, is $51 million in then-year dollars. The cost of those new aircraft per year of life (25 years) is $4.0 million. For the remanufactured aircraft, whose life expectancy is 14 years, the comparable cost is $3.6 million. These costs translate into $13,000 per hour of flight hours remaining for new aircraft (7,500), and $12,000 per hour of flight hours remaining for remanufactured aircraft (4,200).

Our F-14D remanufacturing strategy is designed to capitalize on the long service life of our existing F-14A fleet. The Navy currently operates over 450 F-14As, all of which still possess extensive useful service life. We anticipate the majority of aircraft inducted into the remanufacture program will have nearly 14 years of service life remaining. It would be unreasonable for the Navy to replace these airframes with new aircraft and retire them with so much useful service life remaining. A more cost effective approach is to continue to operate the existing F-14 fleet, capitalizing on the aircraft's longevity, while pursuing a systematic upgrade of capabilities commensurate with the threat. It is this approach which is embodied in the fiscal years 1990-94 amended budget. Closely aligned with this approach is a concerted joint-service effort to develop a naval variant of the Advanced Tactical Fighter (ATF). Our fiscal years 1990-94 program would minimize our investment in existing technology, opting for early introduction of the Navy ATF.

V-22 OSPREY

Senator McCain. As we look at the threat in the years ahead, it would seem that with Mr. Gorbachev's emphasis on Glasnost, the probability of a nuclear confrontation with the Soviets may be reduced. At the same time, as we look around the world both now and in the last 40 years, the threat of the United States involvement in a conventional war or brushfire-type conflict remains high. One of the most serious deficiencies that we have in fighting a conventional war is the ability to get forces to the fight. With the V-22 we will gain a significant capability to rapidly deploy troop transport and combat support aircraft to distant objectives. I speak of the tilt-rotor's capability to self-deploy anywhere in the world with or without tanker support. Since we already have a shortfall in strategic lift, and since we need the ability to quickly deploy worldwide, why would we want to abandon an aircraft program that provides such a tremendous capability to self-deploy?

Mr. Atwood. The ability to self-deploy is of marginal value. Both the V-22 and the CH/MH-53E can be refueled in flight, and thus can deploy without strategic airlift. The self-deployment capability must be examined in the context of operational scenarios. During amphibious operations, aircraft would continue to move aboard naval shipping. Self-deployment would be considered only in conjunction with prepositioned force operations associated with either the Maritime or Norway Prepositioning Programs. In such situations, the CH-53E could self-deploy and arrive well within the timeframe of a "marry-up" operation—about 10 days—or be transported by the C-5. The V-22, however, must self-deploy. In light of the duration of the marry-up period, the greater speed and range of the V-22 are of marginal value. It should be noted that the self-deployment configuration of both aircraft includes extra fuel tanks and minimal payload. Support equipment and materiel for the V-22 would require additional airlift sorties.

For "brushfire-type" conflicts, strategic airlift is not a major concern. In fact, the effects of either alternative on strategic airlift are not a major factor in sizing that program. We did not reduce our strategic airlift program when we put the V-22 in our program, nor did we increase the requirement when we took it out. We currently allocate strategic lift to move Marine medium airlift helicopters. In exercising two prepositioned force operations simultaneously, the approved force would require between 18 and 26 more C-5 sorties than a V-22 force would require (between two fewer and six more than we currently provide). Executing 26 sorties over the time period for a marry-up operation represents a daily requirement of only 2.5 percent of our projected outsize airlift capability or about 1.5 percent of our total strategic airlift. Additionally, this requirement would only persist for the duration of the marry-up period. The Department's strategic airlift program is not sized on the basis of such minor and transient requirements.

Thus, I believe that we made the right choice. The ability to self-deploy without tanker support is an important but very limited advantage. In order for that capability to be useful, we also need the trained marines and soldiers, equipment, weapons, and ammunition to fight and the capability to transport those forces worldwide. These various capabilities need to be in balance. Our decision on the V-22 helps strike such a balance within the limited resources available.

Senator McCAIN. For the last 2 months we have requested information for the record concerning DOD's analysis of the V-22. We have yet to receive responses from DOD which explains the analysis supporting Mr. Cheney's decision to cancel the program. Do you have such analysis and can we see this analysis before we begin the markups on the budget?

Mr. ATWOOD. The cost comparisons used in reaching the decision to cancel the V-22 are shown in the following tables. The comparisons are for Marine Corps and Navy missions. All costs for fiscal year 1989 and prior years are assumed to be sunk and are excluded from the comparison. The procurement costs shown in the "V-22—NTE & Dual Source" line assume that the pilot lot Not-To-Exceed (NTE) option is preserved and that all aircraft after that lot are procured under a dual source strategy (i.e. two production lines) at prices substantially below those in the pilot lot. The procurement costs shown in the "V-22—Adjusted NTE & Coproduction" line assume that the pilot lot NTE option is not preserved, that aircraft costs increase consistent with Bell/Boeing's latest NTE pilot lot proposal (34 percent higher), and that the aircraft are procured under a coproduction acquisition strategy. This alternative estimate is believed to be a more realistic estimate of the likely schedule and cost of the program than the dual-source estimate. (On cost, it reflects the latest cost data possessed by the contractors. On schedule, it does not require fabricating the pilot lot aircraft with less than 12 months of flight testing, as the dual-source estimate requires.)

The source of the O&S costs for all aircraft is the April 1986 V-22 Decision Coordinating Paper (DCP), prepared for the V-22 Milestone II decision. (The cost figures assume all manpower is active.)

The procurement costs for the CH-53, CH-60, and HH-60 were also taken from the V-22 DCP. A discount rate of 10 percent was used, in accordance with normal procedures. Undiscounted figures are shown in Table 2.

As can be seen from Table 1, when you consider the different timing of expenditures for the V-22 versus CH-53E/CH-60 options (which is the purpose of discounting), in all cases the CH-53E/CH-60 options are substantially less than that of V-22, overwhelming any operating savings that the V-22 may produce.

Moreover, the operating costs in these tables use the actual costs of the CH-53E and Seahawk helicopters as against the projected cost of V-22 operations. Typically, operating cost estimates at the development stage of a program underestimate actual operating costs. For example, actual F-15 and F-16 operating costs are about 80 percent higher than those estimated at a comparable early state of those programs.

Even if the Department accepted projected V-22 operating costs and ignored the different timing of expenditures (thus using the undiscounted figures of Table 2), the CH-53E/CH-60 option is less costly unless use of the CH-53 is limited to the so-called "single-sling" option—i.e., it is never allowed to carry more than one High Mobility Multipurpose Wheeled Vehicle (HMMWV) at a time. (It is capable of carrying more than one, but it is argued that in some tactical/operational situations it should not—never allowing it to do so is an extreme case.) If indeed such an extreme single-sling limit were imposed, the Department would have to re-examine whether all of the approximately 350 HMMWVs involved were needed in the early stages of an amphibious operation, or whether some of the equipment carried by these HMMWVs could be put on lighter vehicles.

Table 1.
Comparison of V-22 Alternatives
(Discounted Constant FY 1988 Dollars in Millions)

Alternative	RDT&E	Proc	O&S a/	Total
V-22 (602 aircraft)				
-- NTE & Dual Source	382	9602	2045	12029
-- Adjusted NTE & Coproduction	382	11299	2044	13725
Terminate V-22/Buy Alternative Aircraft Mix - Single Sling				
- CH-53E (376 aircraft)	-	3506 b/	2150	
- CH-60/HH-60 (590 aircraft)	143	3132	1489	
- Total	143	6638	3639	10420
Terminate V-22/Buy Alternative Aircraft Mix - Double Sling				
- CH-53E (225 aircraft)	-	2694 b/	1506	
- CH-60/HH-60 (478 aircraft)	143	2775	1297	
- Total	143	5469	2803	8415

a/ O&S Costs include phase in costs and 20 year steady state costs.

b/ During the budget adjustment deliberation, an extra $216M (discounted constant FY 88 $) was added to the CH-53E (FY 90-94) to achieve more robust support and spares funding. The adjusted totals for the single sling option and the double sling option should be $10,636M and $8,631M, respectively.

Table 2.
Comparison of V-22 Alternatives
(FY 1988 Constant Dollars in Millions)

Alternative	RDT&E	Proc	O&S a/	Total
V-22 (602 aircraft)				
-- NTE & Dual Source	428	16185	10502	27115
-- Adjusted NTE & Coproduction	428	19875	10500	30803
Terminate V-22/Buy Alternative Aircraft Mix - Single Sling				
- CH-53E (376 aircraft)	-	6998 b/	11187	
- CH-60/HH-60 (590 aircraft)	167	7192	8588	
- Total	167	14190	19775	34132
Terminate V-22/Buy Alternative Aircraft Mix - Double Sling				
- CH-53E (225 aircraft)	-	4188 b/	6207	
- CH-60/HH-60 (478 aircraft)	167	5827	7025	
- Total	167	10015	13232	23414

a/ O&S Costs include phase in costs and 20 year steady state costs.

b/ During the budget adjustment deliberations, an extra $257M (constant FY 88 $) was added to the CH-53E (FY 90-94) to achieve more robust support and spares funding. This amount is not reflected in the cost shown here. The adjusted totals for the single sling and the double sling options should be $34,389M and $23,671M, respectively.

Senator McCain. Was the decision to cancel the V-22 based solely on the costs of the alternative force mix of UH-60s and CH-53Es or were operational and survivability factors considered in your decision? I think that we have to remember that the aircraft that we are buying for our Armed Forces will be used for the next 30 years. How did the UH-60/CH-53E force do against the 1997 threat? Can I see your analysis?

Mr. Atwood. The principal Marine Corps mission is amphibious assault. The expected conditions under which our forces would have to operate is the primary factor determining the performance characteristics required of tactical lift aircraft for the assault mission. All of the alternatives postulated in the Navy study "Cost and Operational Analysis of JVX for the Marine Corps Assault Mission" for the medium-lift mission were measured against projected 1990s Soviet force capabilities. These assessments suggest that against a Soviet threat, Marine Corps forces would be likely to face Soviet defenders wielding superior firepower. The over-the-horizon (OTH) assault concept is a response to this projected threat; while the introduction of the LCAC has given us the ability to conduct OTH assaults, the proposed upgrade of the medium-lift force will greatly enhance this capability.

Choosing between tactical lift alternatives is not solely an issue of cost or effectiveness, but rather, of both. Because we are operating within a fixed overall budget, we have to consider not only how much more mission effectiveness we can buy for each additional dollar paid, but also how much we can spend on this mission without harmfully detracting from mission performance in other areas of our defense program. The Marine Corps requires an upgraded medium-lift assault transport force. The DOD-approved CH-53E/CH-60 combination provides necessary improvements to this mission area in balance with our many other defense needs overall.

Senator McCain. In previous testimony from DOD we have heard statements about the supposedly narrow mission of the V-22. Mr. Chu, you prepared a memorandum in January 1984 in response to a congressional question which identified over 30 missions for which the V-22 was either being developed for or could be used for in the future by the services. (Note: only two of these missions applied to the Army which dropped out of the program in 1987.) Can the V-22 still do those missions? Are they still valid? Can the UH-60/CH-53E force do those missions?

Mr. Chu. Those 30 missions are from a list of broad categories of tasks to be performed. They are still valid and could be performed by a V-22 or they could be performed by other fixed wing or rotary wing aircraft. We have done extensive analyses in an attempt to determine how well a V-22 or an all-helicopter alternative could do the primary missions involved. Our conclusion is that conventional helicopters would provide the Marine Corps with an acceptable means of supporting amphibious and land warfare missions. I understand that, in some special circumstances and ancillary missions, speed and range indeed contribute significantly to mission success, but any aircraft we procure must be justified in light of the primary use—that of amphibious assaults and support of ground combat elements ashore—and here we believe that conventional helicopters would provide an acceptable level of performance.

Senator McCain. Mr. Cheney has repeatedly stated that one of his goals is to maintain, if not improve, the industrial base of this Nation. The decision to cancel the V-22, which is built by two prime contractors, and procure UH-60s and CH-53Es, both of which are built by a single prime contractor, will result in one manufacturer producing over 90 percent of all the Nation's military helicopters by 1995. With one producer, how do you maintain the military industrial base and maintain the competition necessary to prevent significant cost increases for the UH-60/CH-53E force and all future helicopter procurement?

Mr. Atwood. One of the decisions we have made with the current budget proposal is to continue the development program for the LHX helicopter. This program has two teams of two companies each still in the running for a contract to produce as many as nearly 2,100 helicopters. This should ensure that we maintain a military helicopter industrial base and maintain the necessary competition in the industry.

Senator McCain. When Mr. Cheney made his decision to cancel the V-22, was he aware that the alternative force being proposed had already been considered and discarded by three other Secretaries of the Navy and two commandants as being less capable and more costly?

Mr. Atwood. Throughout the development history of the V-22, we have believed that the V-22 would provide more capabilities, but at a greater cost. We believed that greater cost to be affordable through a long series of diminishing budget totals. The latest budget reduction forced us to make some very painful decisions. One of them was that we believed the V-22 to be no longer affordable. On the basis of discounted 20-year costs, the all-helicopter alternative is $3 to $5 billion cheaper than the V-22.

Senator McCain. DOD has recently provided congressional testimony that indicates the alternative force mix of UH-60s and CH-53s can still meet the mission requirements of the Marine Corps. Are you aware that the alternative force to the V-22 that you are proposing will provide a 20 percent reduction in assault troop lift capability over the Marine Corps current CH-46 fleet and a 55 percent reduction when compared to a V-22 fleet? Are you saying that the Marine Corps medium lift requirements are not valid and have been reduced over the last year since the May 1988 Defense Resources Board decision to procure V-22s instead of UH-60s and CH-53Es?

Mr. Atwood. Medium-lift force requirements are developed according to the method established in the 1983 Department of the Navy Long-Term Amphibious Lift Requirement and Optimum Ship Mix Study (the DoN Lift Study). In comparing alternative tactical lift forces, both the MV-22 and the CH-53E would carry troops *and* vehicles ashore. For example, fewer than 25 percent of the MV-22 sorties in the scheduled waves of an amphibious assault are expected to comprise troops alone. Conversely, the CH-53E is expected to carry assault troops on every sortie ashore, with the number of troops varying with the size of the external load. Thus, troop-carrying-capacity calculations are meaningless in isolation; force structure planning considers total requirements, of which assault troops are only one part.

Since the MV-22/CH-53E force and the CH-53E/CH-60 force were both sized to meet the same medium-lift requirements, they are both, by definition, capable of performing their primary mission. As tactical lift aircraft, the primary mission of the DOD-approved force and the MV-22 force is to provide ship-to-shore lift for Marine forces embarked on amphibious and prepositioned ships. For this mission, the CH-53E/CH-60 force represents a substantial upgrade over the current CH-46E/CH-53D mix; aside from dramatic improvements in range and payload, the CH-53E/CH-60 medium-lift force would also be considerably more survivable and have greatly improved navigation and communications capabilities relative to the existing medium-lift force.

Questions Submitted by Senator Slade Gorton

V-22 OSPREY

Senator Gorton. Are we really willing to tell our young marines and soldiers that they must survive on the battlefield of the 21st century with systems developed in the 1960s? Isn't that in essence what we are doing if we cancel the speed, range, and survivability of the V-22 for the slower and much less survivable helicopter alternatives?

Mr. Atwood. No, that is not the essence of our proposal. The proposed program is a significant upgrade from the equipment currently in the hands of our marines, e.g., the CH-46. In the majority of amphibious assault missions, the speed and range advantages of the V-22 are negated because other systems have range limitations that will prevent exploiting the full capability of the V-22. While it is true that in some situations the V-22 is more survivable than helicopters, that advantage is not always significant. For example, the V-22 must give up its speed advantage and land like a helicopter during the assault. On longer missions, helicopter vulnerability can be significantly reduced by using nap-of-the-earth flight. Both V-22 and helicopters are vulnerable to missiles which are proliferating on the battlefield. Further, the V-22 program would require $6.5 billion more in fiscal years 1990–94 than the program we have proposed. Accommodating that increase could have an impact on amphibious lift, Marine Corps training and/or structure, or other programs that also affect the survivability of our young soldiers and marines. Thus, our program improves the survivability of our marines and soldiers and, while it may involve some increased risk relative to the V-22, Secretary Cheney and I believe those risks are necessary and acceptable at projected budget levels.

Senator Gorton. While I appreciate that there are tough choices to be made, it seems to me that we have a national asset at risk as a result of the decision to cancel the V-22. Congress has reviewed this program carefully each year and has solidly supported it. We have spent billions of dollars developing this technology for the United States to meet a military requirement and to reap the benefits it will bring to civil aviation. And now, as we see the results of years of hard work and expenditures coming to fruition, are we going to simply "cancel?" Isn't this a short-sighted view of things and an indication that the United States is willing to give up its leadership in the field of tiltrotor technology and allow foreign interests to overtake us?

Mr. Atwood. We have noted the potential commercial uses for the tiltrotor technology, and with the continued development of the V-22 for the remainder of fiscal year 1989, our investment in the program to date should not go to waste. If the V-22 continues to fly successfully, the government will have paid for and assumed the risk for development of the technology on a large scale, and if it is indeed economical to produce and operate a commercial variant without further government subsidy, then civilian organizations are free to pursue this course. Given the development to date, U.S. contractors are in the best position to establish themselves as the worldwide leader of the technology.

Senator Gorton. DOD wants to cancel this program based on cost. How do you put a cost factor on the greater survivability of the V-22 and thus the saving of human life? How do you put costs on tiltrotor technology and what it means to the future of American aerospace business and space progress? How do you put a cost factor on the reduced need for foreign bases and staging areas if we have the V-22 self-deploying capability? How do you put a cost factor on the benefits of speed, range, and increased payload the V-22 provides over a larger helicopter fleet?

Mr. Atwood. We regret having to cancel the V-22 program. The decision, however, was based on a careful consideration of the need to balance our overall defense programs within limited resources, recent and expected gains in amphibious surface lift for the Marine Corps, and the high cost of the V-22 program. In the present budget environment we believe we must accept the lower cost, less capable all-helicopter force.

HMMWV

Senator Gorton. In order to reduce the number of helicopters required, the proposed OSD alternative to the V-22 is based upon the dual-sling concept, where the CH-53 is supposed to externally carry two HMMVs bolted together. We have had testimony that the concept has not been adequately tested, was designed for administrative lift purposes only, and is tactically unsound. In fact, the Commandant has stated that he would not risk soldiers and marines by double-slinging these vehicles at sea and at night. This proposal strikes me as a tragic error and an example of allowing a budget analyst to dictate warfighting doctrine. Since the OSD alternative force is predicated on such a faulty premise, I think that the proposed alternative force should be rejected. Would you care to comment?

Mr. Atwood. The capability to double-sling High Mobility Multipurpose Wheeled Vehicles (HMMWV) has been demonstrated. A test conducted by the Naval Air Test Center in 1985 concluded that device used to rig two HMMWVs for lifting "exhibits excellent potential for future use to increase tactical flexibility of USMC HMMWV assets." We may not be able to double-sling HMMWVs in all operational situations; however, to plan now to never do so would be an extreme case.

[Whereupon, at 11:03 a.m., the committee was adjourned.]

INDEX

A

Page

- Acquisition 30
  - Reform 65
- AH–64 124
  - 1990–91 purchase of 382
  - CAS mission 381
  - Effect of cancellation on Guard and Reserve 381
  - Foreign military sales 381
  - Restart requirements 381
  - Termination of 279, 380
  - Unplanned losses 384
- AHIP and LHX 384, 403
- Air defense systems 270
- Aircraft 276
  - Combat 275
  - Requirements, Navy 388
- Ammunition facilities 191
- Apache helicopter 218, 279, 364
- Armored infantry fighting vehicle 266
  - Other 267
  - Launched bridges 272
- Arms control negotiations 91
- Army:
  - Aviation, AH–64 and AHIP 351
  - Today's trained and ready 140
- Artillery 268
- ASAT 100
  - Arms control considerations 98
  - Capability 205
- ASW projections 202
- ATF and A–12 380
- ATHS capability 384
- Aviation:
  - Army, AH–64 and AHIP 351
  - Navy, F–14D 352

B

- B–1 217, 235
  - Corrective action costs 372
  - Electronic warfare deficiencies 259
- B–1 and B–2, comparison of 368, 371
- B–1B 222, 371
- B–2 107, 194, 217, 365, 371
  - Fly date 371
  - Program 316
- Bigeye development/production program, status of 107
- Black programs 315
- Blackhawk/53E mix 262
- Bolt-out-of-the-blue attack 236
- Bombers and SICBM, survivability of 237
- Bow wave 323
- "Brilliant Pebbles" 64, 107, 207

Page

- Budget:
  - Adopting 1990 335
  - Amended, fiscal years 1990-91 14
  - Authority, estimated 318
  - Authority versus total obligational availability 393
  - Biennial 123
  - Defense, undercosting of 124
  - DOD, fiscal years 1990-91 13
  - Outlays 354
  - Reductions 112
    - Army 113
    - Navy 113
    - USMC 114
    - USAF 115
  - Requests, DOD comparison of 119
  - Revised, fiscal years 1990-91 26
  - Strategic force 207
  - Submissions, revised 116
- Budgetary impact, potential 335
- Budgeting, 2 year 97
- Burdensharing 244, 245

C

- C^3I integration 99
- Carrier force reductions, effect of 98
- Ceiling, outlaying 96
- CFE negotiations, aircraft inclusion 248
- CH-53E 262
- Chemical weapons 100
  - Removal of, from FRG 99
- CINC requirements, ability to satisfy 152
- Close air support:
  - Aircraft decision, follow-on 384
  - Mission of AH-64 381
  - Test plan 388
- Closure cuts 329
- Comptroller and PA&E, functions of 123
- Conflicts, low intensity 67, 170
- Contractor liability 235
- Conventional attack 243
- Conventional forces 37, 46, 50
  - Reductions 57
- *Coral Sea*, early retirement of 259
- Cost overruns 337
- Costs, interest 325
- Cross-decking 208

D

- Defense:
  - Authorization request, amended, fiscal years 1990-91 102
  - Budget, today's 50
  - Industrial base, healthy 92
  - Industries 330
  - Priorities 27
  - Program, 5 year 97, 375
  - Resources, managing 34
  - Transition 49
- Deficit estimates, annual 327
- Depot maintenance backlog 338
- Divisions 274
- DOD:
  - Management practices report 378
  - Net assessment efforts 121
- DOD & CBO estimates, differences between 388, 402
- DOE, spending on 328
- Drug trafficking, detection, and monitoring 108

Page

E

- E–2C ... 362
- East Asia and the Pacific ... 38, 47
- End strength ... 245
- *Enterprise,* U.S.S., overhaul ... 103
- Europe, withdrawal of troops from ... 219

F

- F–14 ... 361, 408
- F–14D:
  - Navy aviation ... 352
  - Price of ... 387
  - Remanufacture versus new production ... 387
- F–14D and NATF ... 406
- F–15E ... 101, 215
  - Air Force TACAIR ... 351
  - Flexibility of ... 382
  - Purchase shortfall ... 383
  - Restart requirements ... 382
  - Termination and maintenance costs ... 382
- Federal outlays, defense as a share of ... 22
- FORCE:
  - And readiness risk levels ... 260
  - Cuts ... 231
  - Levels, reducing ... 77
  - Quality ... 50
- Force structure ... 28
  - And modernization ... 298
  - And weapons systems ... 329
  - Changes ... 16
  - Modernization and readiness ... 240
  - Reductions ... 216
- Forces and costs, long-term projection of ... 124
- Forces, forward deployed ... 231
- Fraud, waste, and abuse ... 91

G

- GAO, additional reductions required ... 376
- GAO/DOD projections ... 309
- Global military posture ... 42
- Goldwater-Nichols reorganization ... 227
- Gorbachev's:
  - Potential success ... 59
  - Troop removal initiatives ... 102
- Gross national product, defense outlays as a share of ... 23
- Ground forces ... 264
- Guard and Reserve ... 339

H

- Helicopters ... 271
- HMMWV ... 415
- Hurricane hunters ... 192

I

- ICBM's ... 363
  - Modernization ... 80
  - Test ... 239
- "Ill Wind" investigation ... 378
- Improved recovery vehicle [IRV] ... 351
- INF phasing out ... 232
- International security environment ... 137
- *Iowa,* U.S.S. ... 189
- Italy, new base in ... 216

Page

J

Joint operational planning system 110

L

Lance systems 224
  Modernization 94
Land forces 80
Latin and Central America 38, 48
Law enforcement agencies:
  DOD support to 109
  Technical support of 109
LHX 125, 196, 218, 277, 278
Lifestyle differences, airmen/soldiers 196

M

"M" account 373
Management savings 97
Manpower 28, 256
  DOD 15
  Programs, priority 258
Maritime defense 36
Midgetman 90
  Silo 251
  Unaffordable 217
Military:
  Capabilities 314
  Construction and family housing 33
  Education and training, international, program importance of 238
  Personnel 393
  Strategy and posture 41
Missiles, antitank 209
Mobile ICBM:
  Priority 251
  Requirements 250
Mobility programs 32
Modernization 56
  British/French 225
MV-22 201, 262
MX basing mode 332
MX and Midgetman 210
  Decision 96

N

National Guard and Reserves 191
National security:
  Objectives 41
  Strategy 54
NATO:
  Alliance 220
  Defense 240
  Force-to-space ratio 249
  Future of 89, 213
  Infrastructure funds 101
  Offshore naval commitments 225
NATO/Warsaw Pact 46, 122
  Balance 263
Naval aviation 100, 106
  Combat readiness of 199
Naval forces 31
Navy:
  Reduction impact 102
  State of 147
Navy Optempo/Perstempo 100, 108
Nuclear missiles, short range 66

Page

O

OH–58D and LHX 384
Operation and maintenance 391
Overseas bases and deployments 329

P

Pay date, moving back 358
Pay raise 103
Panama, abusive treatment in 221
Perestroika 100
Personnel 273
  Programs 252, 255
  Vacancies 403
Phoenix missile 388
  Termination of 219
Pilot training costs, increase in 385
Planning, budgeting, and net assessment 121
Planning projections, 5 year, realistic 407
Planning/reality mismatch 304
POMCUS 339
Priorities:
  Air Force 170
  Future, Navy 156
  Marine Corps 222
  Program 350
Program reductions, proposed, not accepted 21
Program, revised 29
Program terminations 18
  Comparison of 402
  Decisions 407
Programs rescheduled, fiscal year 1990–91 20

R

Rail garrison MX 60, 193, 233
Reactor, new production 334
Readiness 29, 302
  Low, Army Reserves 338
  RC CS/CSS 200
Readiness versus size of force 230
Recruiting 258
Reductions may be required, more 306
Research and development 33
  Cooperative 98
Reserve components 228
Reserve forces 401
  Army, command of 239
Retention, personnel 259
Revolving funds 392

S

Sealift 111
  Fast 204
Shipbuilding and repair industry 110
Shipbuilding cost overruns 313
Shipyards, public 110
Small ICBM missile 82, 194, 212
Southwest Asia 38, 48
Soviet Union 53, 149
  Carriers 197
  Conventional superiority 363
  Military helicopter production 403
  Military power 42
  Modernization 224
  Naval force reductions 197
  Reductions 84

Page
Space ... 37, 45
Spare parts ... 322
  Shortfall ... 335
Special operations forces ... 32
Spending reductions, impact of planned ... 307
SR-71 ... 107, 108
Stealth bomber, cost of ... 223
Strategic:
  Basis ... 136
  C ^{3} ... 239
  Defense, first phase ... 206
  Deterrence ... 163
  Forces ... 31
  The Army ... 138
  Linkages ... 151
  Mobility ... 37, 44
  Modernization ... 50, 73
  Nuclear forces ... 37, 45
  Programs ... 211
Strategic defense initiative [SDI] ... 88, 95, 237, 249
  Program ... 63
Strategies, forward deployed forces ... 105
Strategy, defense ... 25
Sustainability ... 303
  Air Force ... 208
  Shortfalls in ... 321

T

Tacit rainbow ... 103
Tactical air forces ... 32
Tactical Fighter Wing, 401st ... 215
  Relocating to Crotone, Italy ... 79
Tank recovery vehicle ... 383
Tanks, main battle ... 265
Technology:
  Management of ... 319
  Systems, risks on unproven ... 406
  Terminations and illustrative tradeoffs ... 350
Terrorism, international ... 49
Theater forces ... 166
Theater nuclear ... 37
  Forces ... 46
  Systems ... 225
Total force ... 251
  Policy ... 104
Tritium, shortage of ... 129
Troops, reduction of ... 86

V

V-22 Osprey 68, 69, 76, 103, 105, 108, 126, 188, 198, 203, 217, 359, 385, 402, 409, 414
  Alternatives, comparison ... 411, 412
  Cancellation, impact of ... 262
  Marine Corps ... 352
V-22 and H-53/H-60 analysis ... 356

W

War games ... 200
Weapons:
  Anti-tank ... 269
  Old ... 319
Weapons systems ... 331
  Major ... 328
Western Europe, inability to defend ... 209

○